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Iowa Corn Yield Test, Results for 1929

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Iowa Corn Yield Test, Results for 1929

Abstract

The purpose of the Iowa Corn Yield Test is to find for each section of the state those strains of corn which will produce the largest yields of sound grain. Significant differences in yield between strains grown in test field under as nearly as possible the same conditions may be attributed to differences inherent in the strains.

This publication is a progress report bowing the comparative yields obtained in 1929 and the percentage yields for a period of year

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IOWA CORN YIELD TEST

RESULTS FOR 1929

By JOE L. ROBINSON AND A. A. BRYAN



IOWA CORN AND SMALL GRAIN GROWERS' ASSOCIATION

AMES, IOWA

The Iowa Corn Yield Test is conducted by the Iowa Corn and Small Grain Growers' Association in co-operation with the Farm Crops Section, Iowa Agricultural Experiment Station and the Office of Cereal Crops and Diseases, Bureau of Plant Industry, United States Department of Agriculture.

IOWA CORN YIELD TEST

RESULTS FOR 1929

By Joe L. Robinson¹ and A. A. Bryan²

PURPOSE

The purpose of the Iowa Corn Yield Test is to find for each section of the state those strains of corn which will produce the largest yields of sound grain. Significant differences in yield between strains grown in test fields under as nearly as possible the same conditions may be attributed to differences inherent in the strains.

This publication is a progress report showing the comparative yields obtained in 1929 and the percentage yields for a period of years.

PLAN

The general plan of conducting the test in 1929 was essentially the same as in the four previous years.

LOCATION OF TEST FIELDS

The division of the state into Northern, North Central, South Central and Southern sections and of each section into a Western, Central and Eastern

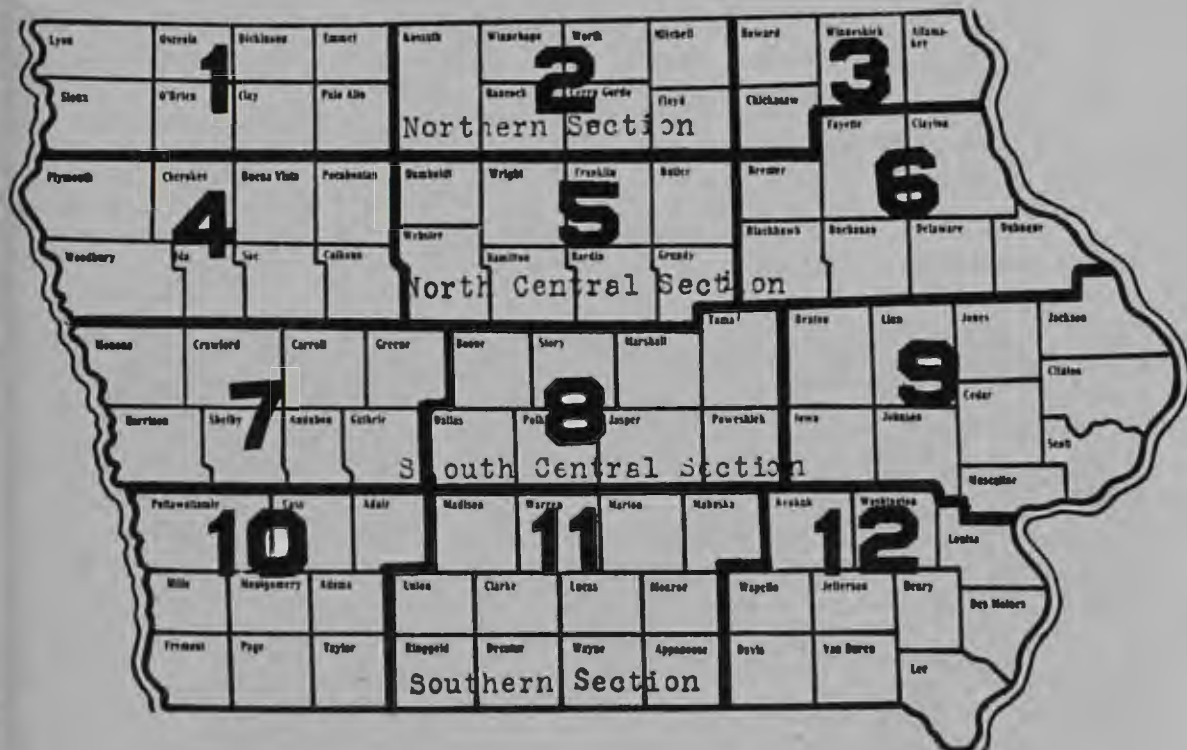


Fig. 1. The above map shows the division of the state into sections and districts for the state yield test.

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district permits the numerous strains to be compared under local conditions. A strain may be entered for comparison in any district or section. The small, early maturing strains of northern Iowa, therefore, compete with one another under the conditions to which they are best suited and the larger, later maturing strains grown further south are compared under the conditions to which they are adapted. The location of the test fields for 1929 is shown in table I.

TABLE I. LOCATION OF FIELDS, RATE OF PLANTING, AND DATES OF PLANTING AND HARVESTING THE 1929 IOWA CORN YIELD TEST

District	County	Kernels Planted Per Hill	Date Planted	Date Harvested
1	Clay	4	May 8	Oct. 17-18
2	Cerro Gordo	4	" 9	" 19-21
3	Chickasaw	4	" 10	" 22-24
4	Buena Vista	3	" 7	" 14-17
5	Wright	3	" 4	" 12
6	Delaware	3	" 15	" 24-25
7	Carroll	3	" 6	" 14-15
8	Story	3	" 10	" 21-31
9	Johnson	3	" 10	" 24-26
10	Mills	3	" 7	" 16-17
11	Marion	3	" 8	" 18-19
12	Henry	3	" 9	" 21-22

CLASSES OF ENTRIES

Hybrids between inbred strains of corn have been entered in the test since 1923. These hybrids have yielded more than the open-pollinated strains quite consistently. Seed of these hybrids, or of strains for crossing to produce hybrid seed, usually has not been available for general distribution. Furthermore, exactly the same hybrid has seldom, if ever, been entered more

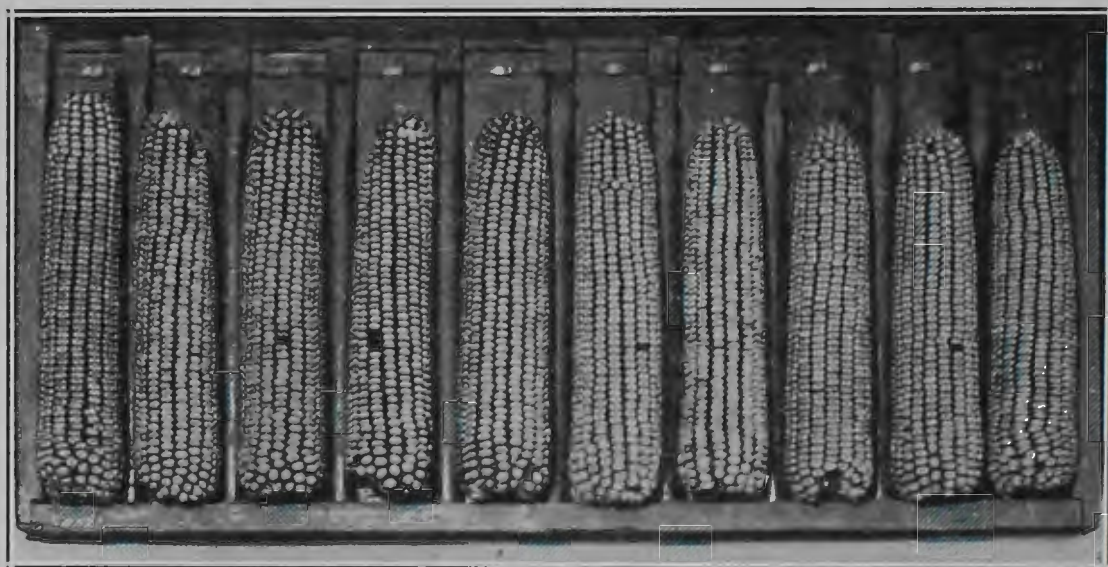


Fig. 2. Meyer Yellow Dent, the highest yielding open-pollinated strain in both South Central and Southern sections.

than one year. It, therefore, seemed unfair to make strains involving no inbreeding compete with hybrids between inbred lines. Accordingly, beginning with the 1926 test, the strains have been divided into two classes, *open-pollinated* for those strains produced without inbreeding and *hybrid* for those strains whose production involved one or more inbred lines. The term inbreeding as here used assumes completely controlled pollination.

The yields of strains in the two classes are comparable, however, as the entries were grown side by side in the same field. The purpose of the classification primarily is for use in awarding premiums.

DISTRIBUTION OF ENTRIES

There were 516 entries in the open-pollinated and hybrid classes of the 1929 test. Several more were received too late to be accepted. Twenty-three additional, experimental seed treatment entries, are not reported in this publication.

Of the 516 entries in the regular classes, 452 were made by Iowa corn breeders, 11 by Illinois breeders, 45 by the Office of Cereal Crops and Diseases, Bureau of Plant Industry, U. S. Department of Agriculture and the Farm Crops Section of the Iowa Agricultural Experiment Station and eight by the Genetics Section of the Iowa Agricultural Experiment Station. A strain of corn entered by one individual in each of the three districts of a section is known as a section entry. A strain entered in one district is known as a district entry. The distribution of entries by classes in districts and sections is shown in table II.

TABLE II. DISTRIBUTION OF DISTRICT AND SECTION ENTRIES IN THE 1929 IOWA CORN YIELD TEST

Section	District No.	Number of entries		
		Open-Pollinated	Hybrid	Total
District Entries				
Northern	1	20	10	30
Northern	2	27	12	39
Northern	3	12	8	20
North Central	4	30	29	59
North Central	5	26	20	46
North Central	6	11	14	25
South Central	7	28	24	52
South Central	8	36	38	74
South Central	9	24	25	49
Southern	10	26	15	41
Southern	11	21	18	39
Southern	12	25	17	42
Total		286	230	516
Section Entries				
Northern	1-2-3	6	8	14
North Central	4-5-6	8	14	22
South Central	7-8-9	14	20	34
Southern	10-11-12	12	15	27
Total		40	57	97

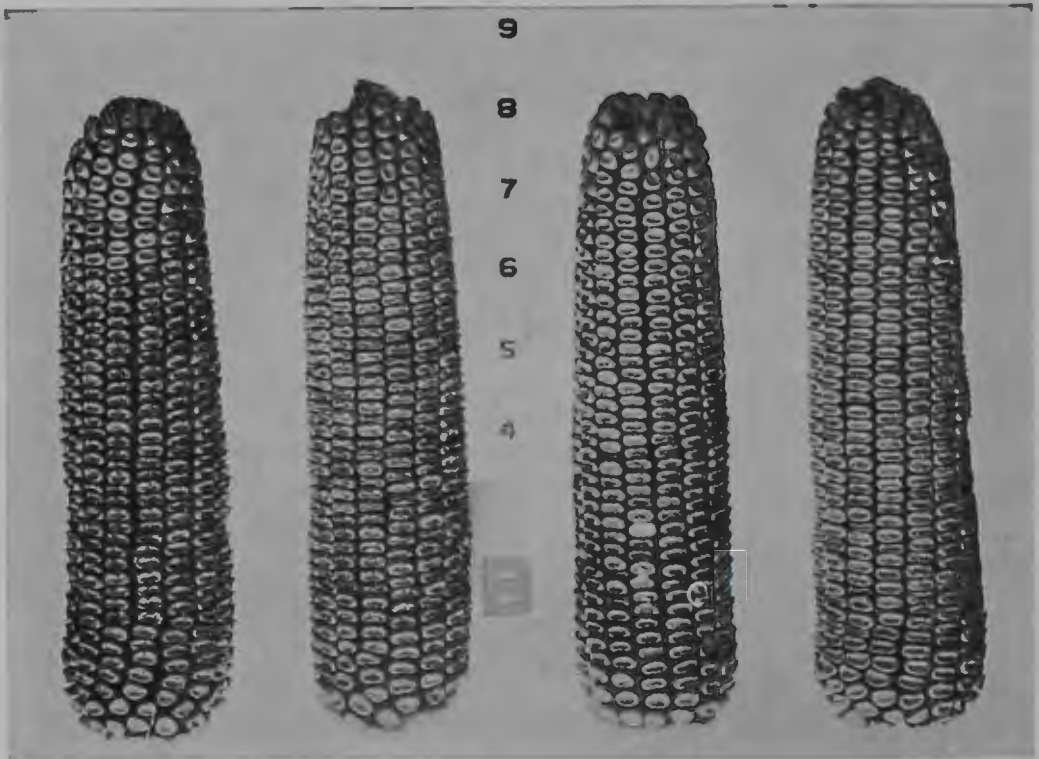


Fig. 3. Golden King. This strain has the best yield record for northern Iowa and is also earliest in maturity. It is well adapted for general planting thruout northern Iowa. The name Golden King originated with Wm. McArthur of Cerro Gordo County.

IDENTIFICATION OF ENTRIES

Each entry was given a number by which it was known throughout the season. The record of these numbers with the corresponding names and addresses of their owners was sealed and placed in the Union National Bank of Ames at planting time and was not opened until after the computation of results had been completed.

ARRANGEMENT OF PLATS

Each entry was planted in ten plats distributed in a restricted random manner over the test field. Each plat consisted of two rows twelve hills long without borders. Data obtained in previous years indicated that border rows were not entirely necessary provided the stands were fairly uniform. The use of two-row plats made it possible to take care of this factor through harvesting the two rows separately. Eliminating border rows and thereby reducing the area required had several decided advantages: (1) under normal conditions it was possible to plant a field in one day with a relatively small crew and thus do better work; (2) usually the small area was found more readily; (3) the smaller plats seemed to be more uniform; (4) by using results from each row, the entire plat was harvested, thus reducing materially the task of cleaning up at that time.

PLANTING AND HARVESTING

The rates and dates of planting and dates of harvesting are shown in table I. Four kernels to the hill were planted in all the fields of the Northern section and three kernels in all other fields. The corn was planted by hand to insure a uniform rate and was not thinned. All fields were planted be-

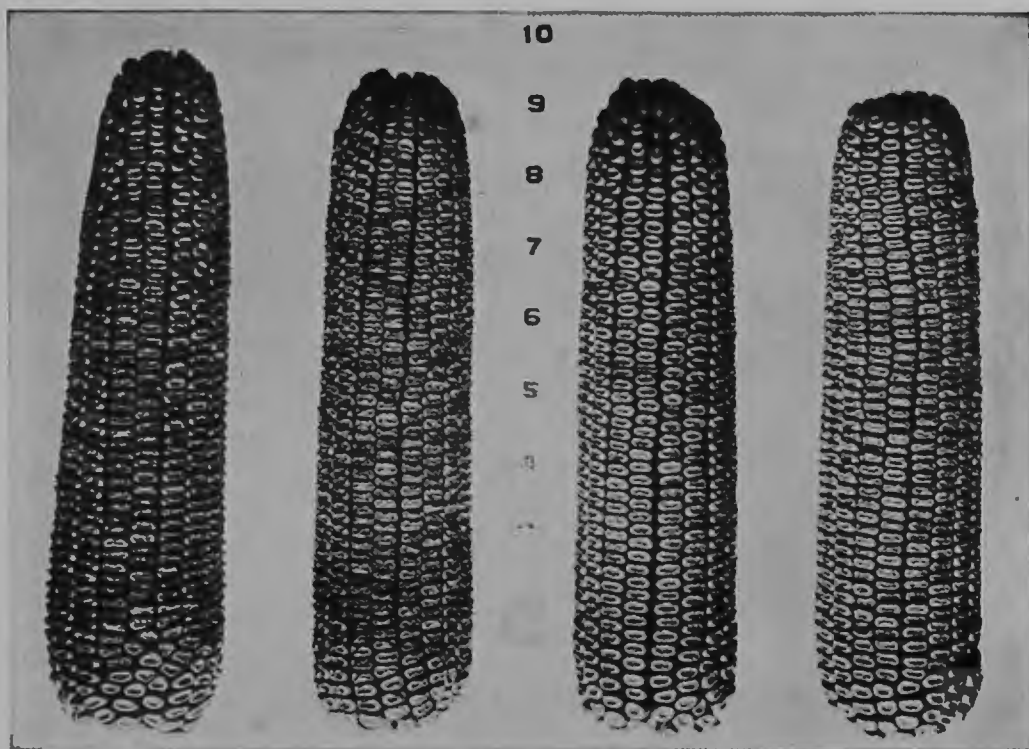


Fig. 4. Osterland Yellow Dent is one of the best yielding strains in north central Iowa. The largest acreage is found in district 5. It was developed by H. F. Osterland of Franklin County.

tween May 4 and May 15. The seed bed was in good condition on all fields. Harvesting was completed between October 12 and October 31.

COMPUTATION OF YIELDS

The yield of each district entry generally was computed from the product of 240 hills. A few entries in some fields had less than ten replications due to discarding the results from damaged plats.

The yield of a section entry, excepting where plats were damaged and discarded, was computed from the product of 720 hills distributed over the three fields of a section.

Yields represent sound shelled grain containing 15 percent of moisture. Determinations of moisture content at harvest, shelling percentage and percentage of moldy corn were made on a 50 pound sample of ears (25 pounds from each of two replications) taken at harvest and shipped to Ames.

In determining the percentage of moldy corn any ear one-half or more of which was moldy was discarded and the percentage by weight of mold-free corn computed. The yield of each entry was reduced to the percentage of mold-free corn.

The number of ears in the moisture sample was determined for each entry and from this the number of ears in 100 pounds computed.

PUBLICATION OF NAMES

When the corn yield test was begun in 1920 it was agreed that only the names of those whose corn ranked in the highest yielding third would be made public. This policy has been followed each year. The number of each entry not ranking in the upper third, however, is made known to the individual making that entry so that he may be able to make comparison with other entries.

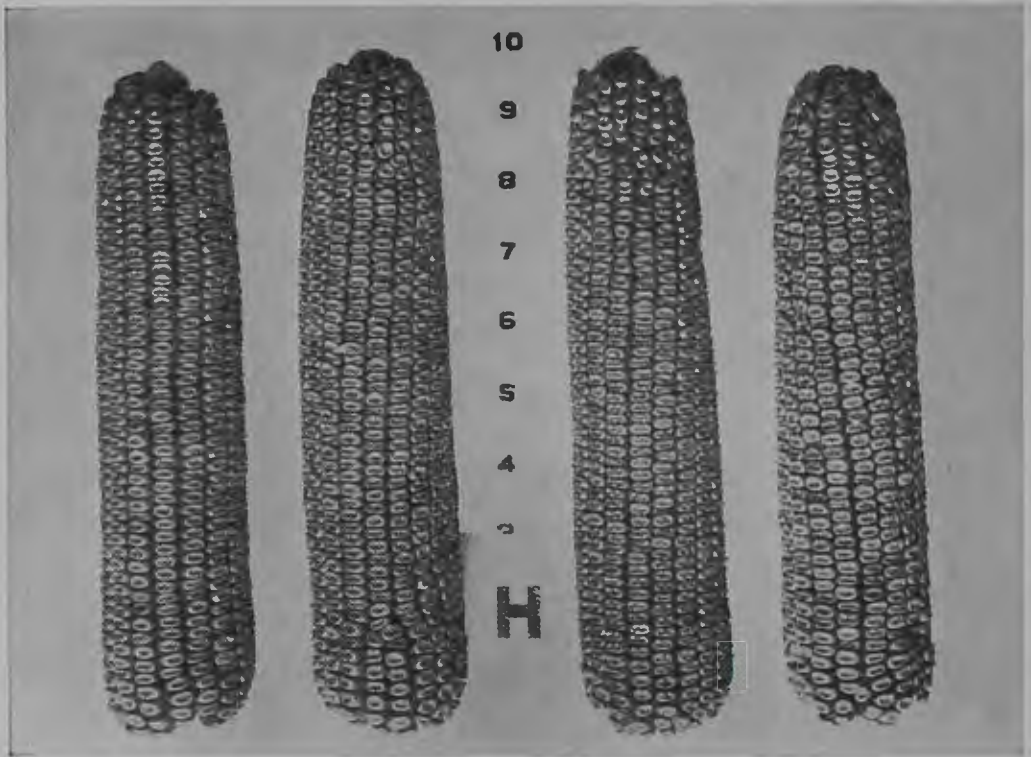


Fig. 5. Black Yellow Dent. A strain of Reid developed by Clyde Black of Dallas County who followed systematic breeding work thru a period of years. This corn gained early prominence by making the best yield record in each of the first two years of the test. Its performance has been most outstanding in district 8 where the largest acreage is found.

RESULTS

The average field yields obtained in 1929 varied from 50.92 bushels an acre in District 6 to 92.82 bushels in District 9. The differences between the highest and lowest yielding entries in the same field varied from approximately eight to 37 bushels an acre in the open-pollinated class and from 16 to 45 bushels in the hybrid class. Some of the lower yields resulted from poor stands. The acre yields, moisture, shelling, and stand percentages and lodging grades are shown by districts in table III and by sections in table IV.

The differences between the highest and lowest yielding section entries were less than those between the highest and lowest yielding district entries. These differences however may be more significant because of their being the average of three tests. The relative yielding ability of a strain may be obtained more quickly by entering it in all three districts of a section. As the climatic and soil conditions vary through the section, a single year's result as a section entry may be as valuable as the result of three years' testing in one district. The data however have indicated that most strains yielded somewhat similarly in the different districts of a section.

Those who have followed the results of the yield test from year to year will be impressed with the fact that many of the strains reported among the highest yielding in the 1929 test have ranked high in past years. It is evident that several strains in the different districts of the state are producing through a period of years considerably larger acre yields than the average of the strains in the region.

TABLE III. DATA ON DISTRICT ENTRIES ARRANGED IN ORDER OF YIELD

District Number One

Rank	Entry No.	Acre Yield		Moisture %	Shelling %	Lodging Grade	Stand %	Name	Address	County	Variety
		Bu.	% of Av.								
Open-pollinated Class											
1	J123	68.56	112.9	18.0	84.8	2.2	84.5	Wm. McArthur, Mason City, Cerro Gordo.....			Golden King
2	107	67.55	111.2	23.2	84.2	2.8	83.5	John Heuck, Everly, Clay.....			Kossuth Reliance
3	H111	66.71	109.9	20.0	84.9	2.7	84.6	Stuart N. Smith, Granville, O'Brien.....			Early Ioleaming
4	A101	64.69	106.5	19.1	84.9	2.8	84.5	A. B. Rosenberger, Estherville, Emmett.....			Golden King
5	120	64.05	105.5	22.7	84.6	2.6	80.2	G. V. Giffin, Ringsted, Palo Alto.....			Golden Reliance
6	112	63.42	104.4	24.8	84.0	2.5	83.6	Stuart N. Smith, Granville, O'Brien.....			Ioleaming
7	121	63.22	104.1	21.5	83.8	2.9	84.5	Albert M. Schmitz, Remsen, Plymouth.....			Y. F. & W.
8	I122	63.04	103.8	18.0	84.5	2.8	85.7				
9	G110	62.72	103.3	23.8	83.3	2.8	82.5				
10	116	62.25	102.5	21.4	83.7	2.8	83.3				
11	109	61.86	101.9	25.4	84.3	2.5	81.0				
12	128	61.09	100.6	25.1	83.7	2.7	85.2				
13	114	58.93	97.1	28.0	83.9	2.9	81.1				
14	119	57.89	95.3	23.4	83.9	2.6	78.0				
15	108	56.84	93.6	20.2	84.0	2.9	77.7				
16	129	56.68	93.3	22.8	83.2	2.9	79.1				
17	115	56.53	93.1	22.2	84.4	3.0	72.4				
18	F106	56.31	92.7	27.1	84.1	2.9	80.1				
19	118	51.22	84.4	25.5	84.3	2.9	79.5				
20	117	50.89	83.8	23.7	84.2	2.7	77.2				
Hybrid Class											
1	E105	75.63	113.2	29.1	85.4	3.1	84.3	F. C. & U. S. D. A., Ames, Story.....			381 x 382
2	M126	72.84	109.0	19.2	86.1	2.4	92.2	Turner & Wallace, Paton, Greene.....			Hi-Bred T3
3	C103	71.00	106.2	22.5	85.6	2.6	88.9	Hi-Bred Corn Co. by Newlin, Grimes, Polk.....			W1
4	D104	70.57	105.6	16.1	82.5	3.9	84.6				
5	N127	69.13	103.4	24.4	84.8	2.4	85.8				
6	L125	67.08	100.4	26.2	83.5	2.4	86.1				
7	B102	64.87	97.1	22.6	84.8	2.4	79.3				
8	113	63.97	95.7	24.7	83.5	2.6	74.7				
9	K124	63.70	95.3	26.4	83.5	2.1	80.5				
10	130	49.50	74.1	30.4	81.4	2.3	67.1				

District Number Two

Rank	Entry No.	Acre Yield		Moisture %	Shelling %	Lodging Grade	Stand %	Name	Address	County	Variety
		Bu.	% of Av.								
Open-pollinated Class											
1	230	53.79	111.0	21.8	84.3	2.2	79.6	Wm. McArthur, Mason City, Cerro Gordo.....			Golden King E
2	210	53.71	110.9	25.8	82.9	2.2	78.6	R. G. Schumacher, Thornton, Cerro Gordo.....			Smith Yel. Dent
3	G219	53.40	110.2	23.2	83.2	2.1	78.3	Frank Parcaut, Sutherland, O'Brien.....			Golden King
4	211	52.83	109.1	23.2	82.9	2.3	75.6	Niels Sorenson, Ringsted, Palo Alto.....			Leaming
5	A201	52.17	107.7	22.4	83.8	2.2	79.1	A. B. Rosenberger, Estherville, Emmet.....			Golden King
6	H220	52.06	107.5	21.5	84.3	2.3	77.0	Stuart N. Smith, Granville, O'Brien.....			Early Ioleaming
7	226	51.37	106.0	27.7	81.7	2.2	80.8	A. E. Mallory, Hampton, Franklin.....			Golden Crown
8	222	50.40	104.0	26.1	83.1	2.4	79.4	Royal Jacobs, Rudd, Floyd.....			White Dent
9	J229	50.40	104.0	21.3	85.0	2.3	78.2	Wm. McArthur, Mason City, Cerro Gordo.....			Golden King
10	237	50.33	103.9	25.5	82.1	2.1	71.4				
11	214	50.21	103.7	21.0	82.6	2.2	83.2				
12	216	49.69	102.6	27.5	85.1	2.7	79.3				
13	I228	49.42	102.0	21.6	84.1	2.5	79.7				
14	213	48.90	100.9	26.0	82.9	2.2	77.8				
15	227	48.81	100.8	22.8	83.9	2.2	84.5				
16	221	48.64	100.4	25.3	83.0	2.2	76.8				
17	224	48.33	99.8	23.0	81.5	2.2	81.7				
18	215	47.95	99.0	25.9	84.3	2.1	77.8				
19	239	46.15	95.3	21.7	83.1	2.3	74.9				
20	231	46.14	95.3	26.4	84.9	2.1	80.0				
21	218	46.01	95.0	28.1	81.6	2.7	78.4				
22	223	45.78	94.5	22.4	84.5	2.6	73.6				
23	225	45.03	93.0	25.0	83.2	1.9	75.3				
24	232	44.56	92.0	27.8	83.7	2.2	68.4				
25	F212	43.90	90.6	29.3	83.1	2.3	71.4				
26	238	43.11	89.0	32.1	81.4	2.0	45.8				
27	217	34.82	71.9	22.2	85.0	3.1	65.2				

District Number Two (Continued)

Rank	Entry No.	Acre Yie'd		Moisture %	Shelling %	Lodging Grade	Stand %	Name	Address	County	Variety	
		Bu. % of Av.										
Hybrid Class												
1	M235	71.29	111.1	18.5	85.1	2.2	83.3	Turner & Wallace, Paton, Greene.....			Hi-Bred T3	
2	206	70.72	110.3	25.3	84.7	1.8	87.5	F. C. & U. S. D. A., Ames, Story.....			Cross B	
3	205	70.59	110.1	22.8	86.2	2.7	79.8	F. C. & U. S. D. A., Ames, Story.....			Cross A	
4	207	68.06	106.1	27.4	85.0	2.6	80.8	F. C. & U. S. D. A., Ames, Story.....			Cross C	
5	N236	63.56	99.1	20.9	84.3	2.1	77.6					
6	C204	63.04	98.3	22.7	85.0	2.2	83.3					
7	E209	62.57	97.6	30.0	85.0	2.4	82.9					
8	D208	61.69	96.2	20.8	82.6	3.7	80.4					
9	203	61.49	95.9	24.6	83.5	1.6	87.8					
10	B202	61.39	95.7	24.6	83.3	2.0	76.7					
11	L234	60.03	93.6	26.4	82.8	2.0	79.0					
12	K233	55.30	86.2	26.2	82.6	2.0	64.1					

District Number Three

Rank	Entry No.	Acre Yield		Moisture %	Shelling %	Lodging Grade	Stand %	Name	Address	County	Variety
		Bu.	% of Av.								
Open-pollinated Class											
1	J315	66.46	115.7	21.2	84.1	2.2	82.3	Wm. McArthur, Mason City, Cerro Gordo.....			Golden King
2	H310	63.43	110.4	21.5	83.9	2.2	78.9	Stuart N. Smith, Granville, O'Brien.....			Early Ioleaming
3	312	61.22	106.6	23.9	84.7	2.6	79.7	Henry Fox, Elma, Howard.....			Fox Yel. Dent
4	313	59.88	104.3	25.2	83.0	2.4	75.1	Wm. B. Smith, Nashua, Floyd.....			Smith Yel. Dent
5	308	57.51	100.1	26.2	84.3	2.4	79.3				
6	G309	57.19	99.6	27.4	82.4	2.4	78.0				
7	I314	57.13	99.5	23.0	83.9	2.3	82.9				
8	A301	56.22	97.9	23.4	83.8	2.3	77.0				
9	311	54.69	95.2	25.0	80.2	2.3	74.8				
10	320	53.73	93.6	25.1	81.7	2.1	76.9				
11	303	53.43	93.0	24.1	83.0	2.1	74.8				
12	F307	48.30	84.1	30.6	81.3	2.2	66.0				
Hybrid Class											
1	C304	73.53	110.7	23.0	85.8	2.0	83.6	Hi-Bred Corn Co. by Newlin, Grimes, Polk.....			W1
2	D305	72.30	108.7	22.6	82.0	2.0	81.3	F. C. & U. S. D. A., Ames, Story.....			314 x 361
3	E306	71.88	108.1	23.3	84.8	2.1	79.7	F. C. & U. S. A., Ames, Story.....			381 x 382
4	N319	69.30	104.2	24.7	83.9	2.0	80.1				
5	M318	67.71	101.8	20.5	85.7	1.9	80.2				
6	B302	61.41	92.4	24.6	83.6	1.8	73.0				
7	L317	61.27	92.1	25.5	82.2	1.7	74.7				
8	K316	54.43	81.9	26.4	82.9	1.7	54.1				

District Number Four

Rank	Entry No.	Acre Yield		Moisture %	Shelling %	Lodging Grade	Stand %	Name	Address	County	Variety
		Bu.	% of Av.								
Open-pollinated Class											
1	450	94.13	110.7	27.6	85.1	2.5	94.4	J. J. Feldman, Breda, Carroll.....			Feldman Y. D.
2	D417	92.96	109.4	27.5	85.6	2.5	91.7	H. F. Osterland, Faulkner, Franklin.....			Osterland Y. D.
3	444	92.02	108.3	24.2	85.4	2.8	91.4	Fred N. Rupp, Cherokee, Cherokee.....			R & K
4	433	91.80	108.0	27.4	84.7	2.4	93.6	Ronald M. Wilson, Sac City, Sac.....			Early Krug
5	436	88.83	104.5	21.8	85.0	2.8	92.2	Glass Bros., Sac City, Sac.....			Sac Co. Yellow
6	R437	88.59	104.2	26.6	85.4	2.5	92.6	Roy J. Clampitt, New Providence, Hardin.....			Rcid Y. D.
7	439	88.58	104.2	26.5	85.4	2.2	88.2	J. N. Horlacher, Storm Lake, Buena Vista.....			No. 58
8	O428	88.34	103.9	27.8	84.3	2.5	91.0	T. A. Chantland, Badger, Webster.....			Smooth Iodent
9	453	88.07	103.6	25.6	86.0	2.5	90.3	A. K. Christiansen, Newell, Buena Vista.....			R. Y. D.
10	432	87.52	103.0	28.4	84.3	2.6	88.3	Ronald M. Wilson, Sac City, Sac.....			King Gold
11	442	87.52	103.0	23.7	85.0	2.7	91.4				
12	S443	85.94	101.1	25.0	85.5	2.4	88.9				
13	Q431	85.91	101.1	26.6	84.3	3.0	90.3				
14	458	85.35	100.4	29.7	84.4	2.3	91.8				
15	457	84.88	99.9	22.9	85.4	2.8	82.4				
16	435	84.59	99.5	24.1	85.1	2.7	88.5				
17	T447	83.28	98.0	23.6	84.0	2.5	86.9				
18	445	82.92	97.6	20.9	85.2	2.9	89.7				
19	446	82.75	97.4	25.0	85.5	3.0	88.9				
20	U449	82.47	97.0	23.1	83.7	2.1	91.8				
21	438	81.93	96.4	24.5	84.4	2.7	90.4				
22	430	81.90	96.4	32.1	83.9	2.2	88.6				
23	440	81.14	95.5	25.2	84.7	2.5	87.2				
24	V455	80.64	94.9	17.8	86.1	2.3	90.8				
25	448	80.44	94.6	21.7	84.0	2.2	89.3				
26	434	80.39	94.6	24.7	84.0	2.5	82.9				
27	459	79.56	93.6	25.4	84.6	2.7	89.6				
28	456	79.42	93.4	23.9	85.6	2.4	85.7				
29	441	79.07	93.0	23.9	85.8	3.0	86.0				
30	454	78.94	92.9	24.2	84.5	2.9	86.3				

District Number Four (Continued)

Rank	Entry No.	Acro Yield		Moisture %	Shelling %	Lodging Grade	Stand %	Name	Address	County	Variety
		Bu. % of Av.									
Hybrid Class											
1	M426	108.17	116.7	22.1	86.4	2.2	95.0	Hi-Bred Corn Co. by Casady, Grimes, Polk.....			H5
2	E418	106.83	115.3	24.1	86.7	1.5	97.1	Hi-Bred Corn Co. by Newlin, Grimes, Polk.....			C2
3	L425	101.22	109.2	23.5	85.8	1.2	94.4	Hi-Bred Corn Co. by Casady, Grimes, Polk.....			H3
4	G420	99.42	107.3	19.2	87.0	2.0	95.3	Hi-Bred Corn Co. by Newlin, Grimes, Polk.....			W1
5	451	97.65	105.4	22.9	85.1	2.2	96.5	J. J. Feldman, Breda, Carroll.....			Cross F & HT
6	J423	97.40	105.1	27.0	84.4	1.3	96.1	Henry Field Seed Co., Shenandoah, Page.....			F1-Imp. Mule
7	N427	96.55	104.2	23.8	86.4	1.6	94.7	Hi-Bred Corn Co. by Newlin, Grimes, Polk.....			Hi-Bred N1
8	410	96.24	103.9	26.9	85.9	2.6	95.0	Geo. M. Allee, Newell, Buena Vista.....			Cross A7
9	C403	95.29	102.8	24.7	84.0	1.6	95.8	Hi-Bred Corn Co. by Collins, Menlo, Guthrie.....			Hi-Bred C15
10	H421	95.07	102.6	23.1	87.2	2.4	92.1	F. C. & U. S. D. A., Ames, Story.....			381 x 382
11	A401	93.70	101.1	24.8	86.2	2.0	87.1				
12	B402	93.36	100.8	26.1	84.7	1.6	92.2				
13	411	93.14	100.5	23.8	84.8	2.5	95.0				
14	404	93.05	100.4	28.4	84.1	2.1	93.2				
15	I422	92.97	100.3	24.8	85.0	2.2	90.7				
16	415	92.87	100.2	22.1	84.8	2.7	93.1				
17	407	92.84	100.2	27.5	84.1	2.4	92.2				
18	P429	92.72	100.1	25.8	85.9	1.9	96.0				
19	452	91.74	99.0	26.2	84.3	2.4	91.9				
20	409	90.19	97.3	26.8	85.9	2.3	92.8				
21	K424	89.60	96.7	25.6	85.6	1.1	89.9				
22	405	89.40	96.5	28.8	83.7	2.6	90.3				
23	406	89.36	96.4	29.1	85.0	2.7	95.3				
24	413	89.14	96.2	26.0	84.6	2.3	93.8				
25	412	88.44	95.4	26.9	85.4	2.3	92.6				
26	414	87.14	94.0	24.7	84.8	2.8	92.6				
27	416	85.57	92.3	26.2	84.1	2.6	94.7				
28	408	85.13	91.9	28.1	83.3	2.6	93.6				
29	F419	63.07	68.1	25.2	87.7	2.3	84.7				

District Number Five

Rank	Variety	Acro Yield		Maturity %	Shelling %	Logline	Grade	Sound %	Name	Address	County	Variety
		Bu.	% of Av.									
Open-pollinated Class												
1	308	88.45	116.0	29.8	85.2	2.8	84.7	H. F. Osterland, Faulkner, Franklin	S. O. Y. D.			
2	R323	85.60	112.2	31.4	83.9	3.5	79.7	Roy J. Clappitt, New Providence, Hardin	Reid Y. D.			
3	D507	82.98	110.1	31.6	85.7	2.6	85.7	H. F. Osterland, Faulkner, Franklin	Osterland Y. D.			
4	509	82.74	109.8	27.0	84.1	3.0	76.9	F. H. Monson, Gowrie, Webster				
5	528	82.19	107.8	30.1	84.5	3.2	78.9	Day Bros., Gilmore City, Humboldt	Osterland Y. D.			
6	8548	81.90	107.4	28.4	84.4	2.7	78.8	Fred N. Rupp, Cherokee, Cherokee				
7	524	81.04	106.2	31.7	85.5	3.1	76.8	T. A. Chantland, Badger, Webster	Imp. Yel. Dent			
8	O523	80.56	105.6	31.6	83.9	2.9	81.1	T. A. Chantland, Badger, Webster	Smooth Iodent			
9	522	80.14	105.1	30.2	85.2	2.8	78.1	S. S. Wilson, Traer, Tama	Dahiel Y. D.			
10	Q326	80.11	105.0	30.9	84.9	3.4	78.1					
11	546	80.10	105.0	32.3	85.8	3.7	77.2					
12	T341	77.04	101.0	27.0	83.9	2.9	76.9					
13	U343	76.73	100.6	25.8	82.9	2.7	81.0					
14	306	76.66	100.5	31.5	84.9	2.9	79.7					
15	526	75.77	99.3	25.4	84.8	2.9	80.4					
16	525	75.58	99.1	32.7	84.9	2.8	76.7					
17	V345	75.32	98.8	22.4	85.3	2.5	85.0					
18	522	75.19	96.0	27.8	85.1	3.3	75.6					
19	502	72.76	95.4	31.7	84.8	2.9	68.1					
20	534	72.46	95.0	26.9	85.2	2.9	68.6					
21	529	71.74	94.1	27.0	85.7	3.1	69.3					
22	529	70.76	92.8	29.1	83.6	3.1	74.4					
23	501	68.94	90.4	27.5	82.3	3.0	70.4					
24	537	66.94	87.8	31.0	84.5	2.5	64.2					
25	543	66.54	87.2	29.8	83.8	2.8	62.9					
26	544	54.77	71.8	30.7	84.2	3.2	49.3					

District Number Five (Continued)

Rank	Entry No.	Acre Yield		Moisture %	Shelling %	Lodging Grade	Stand %	Name	Address	County	Variety
		Bu.	% of Av.								
Hybrid Class											
1	E510	98.36	115.4	28.5	86.6	1.9	86.4	Hi-Bred Corn Co. by Newlin, Grimes, Polk.....			C2
2	M520	96.90	113.7	29.1	84.7	2.6	83.2	Hi-Bred Corn Co. by Casady, Grimes, Polk.....			H5
3	J517	96.59	113.4	31.9	84.4	1.8	84.9	Henry Field Seed Co., Shenandoah, Page.....			F1-Imp. Mule
4	526	95.67	112.3	28.5	85.5	2.2	90.8	Mead & Wallace, Mitchellville, Polk.....			MW2
5	A508	92.77	108.9	27.4	85.7	2.2	77.2	Hi-Bred Corn Co. by Collins, Menlo, Guthrie.....			Hi-Bred C10
6	L519	91.78	107.7	27.7	85.6	1.9	81.7	Hi-Bred Corn Co. by Casady, Grimes, Polk.....			H3
7	527	91.29	107.1	26.6	86.8	2.6	79.3	Mead & Wallace, Mitchellville, Polk.....			MW3
8	G512	90.83	106.6	23.7	87.4	2.4	85.3				
9	N521	89.77	105.4	23.9	85.7	2.2	83.3				
10	B504	89.55	105.1	30.0	84.5	2.5	82.8				
11	531	87.86	103.1	29.8	86.0	2.5	75.8				
12	P525	87.78	103.0	31.1	86.1	2.5	85.4				
13	H515	85.39	100.2	28.3	86.0	3.1	78.9				
14	C505	83.75	98.3	31.8	83.1	2.4	79.3				
15	528	83.31	97.8	29.6	84.6	2.0	79.7				
16	I516	82.44	96.7	28.5	85.0	2.7	70.4				
17	K518	74.58	87.5	34.1	84.0	2.2	76.0				
18	514	70.16	82.3	33.2	86.1	1.5	60.8				
19	513	60.84	71.4	33.3	83.2	2.0	47.9				
20	F511	54.60	64.1	29.5	87.3	2.3	72.8				

District Number Six

Rank	Entry No.	Acre Yield		Moisture %	Shelling %	Lodging Grade	Stand %	Name	Address	County	Variety
		Bu.	% of Av.								
Open-pollinated Class											
1	U623	53.46	108.0	24.5	83.2	3.0	87.9	Smith Bros., Center Jct., Jones.....			Ioleaming
2	R619	52.53	106.1	28.4	84.0	3.2	84.4	Roy J. Clampitt, New Providence, Hardin.....			Reid Y. D.
3	D604	51.84	104.7	29.7	84.2	3.2	87.5	H. F. Osterland, Faulkner, Franklin.....			Osterland Y. D.
4	S621	50.11	101.2	30.5	84.5	3.2	84.9	Fred N. Rupp, Cherokee, Cherokee.....			Krug
5	T622	49.52	100.0	26.9	83.6	3.2	80.7				
6	V625	49.14	99.3	21.9	84.8	3.4	82.2				
7	O615	48.76	98.5	31.2	84.7	2.8	84.0				
8	620	48.34	97.6	27.6	83.6	3.4	82.1				
9	624	47.91	96.8	25.9	84.0	3.6	81.1				
10	Q618	47.21	95.4	30.7	83.5	3.0	79.0				
11	617	45.74	92.4	32.8	82.8	3.5	83.5				
Hybrid Class											
1	J610	59.19	113.8	30.9	82.9	1.8	85.8	Henry Field Seed Co., Shenandoah, Page.....			F1-Imp. Mule
2	M613	58.05	111.6	25.7	84.9	2.4	84.2	Hi-Bred Corn Co. by Casady, Grimes, Polk.....			H5
3	E605	57.18	109.9	26.2	85.1	1.9	86.0	Hi-Bred Corn Co. by Newlin, Grimes, Polk.....			C2
4	A601	56.02	107.7	25.0	85.8	2.5	79.3	Hi-Bred Corn Co. by Collins, Menlo, Guthrie.....			Hi-Bred C10
5	G607	55.16	106.0	22.5	85.8	2.6	86.9	Hi-Bred Corn Co. by Newlin, Grimes, Polk.....			W1
6	L612	54.99	105.7	27.8	84.1	1.8	85.3				
7	I609	52.28	100.5	27.7	83.9	2.8	77.1				
8	H608	52.08	100.1	28.2	85.6	2.9	84.2				
9	B602	51.06	98.1	30.3	82.8	2.3	82.4				
10	N614	50.57	97.2	28.1	85.0	2.0	83.3				
11	C603	50.50	97.1	28.5	82.1	2.5	82.8				
12	P616	48.50	93.2	27.7	85.1	2.3	83.2				
13	K611	48.46	93.1	26.5	83.5	2.1	82.1				
14	F606	34.31	65.9	28.5	85.8	3.0	76.1				

District Number Seven

Rank	Entry No.	Acre Yield		Moisture %	Shelling %	Lodging Grade	Stand %	Name	Address	County	Variety
		Bu.	% of Av.								
Open-pollinated Class											
1	747	65.94	113.3	22.9	85.3	2.0	82.9	Roy A. Wood, Moorhead, Monona.....			Wood Krug
2	742	65.51	112.6	26.5	86.3	2.0	82.6	R. M. Lofstedt, Rippey, Greene.....			Krug
3	BB738	65.12	111.9	25.7	85.3	2.0	86.7	Clarence Meyer, Van Meter, Madison.....			Meyer Y. D.
4	S724	63.54	109.2	26.7	85.5	2.0	86.7	Lester Pfister, El Paso, Ill., Woodford.....			Pfister Krug
5	X734	63.50	109.1	26.7	83.7	2.0	86.8	Henry Field Seed Co., Shenandoah, Page.....			Imp. Utility Yel.
6	EE741	61.53	105.7	25.1	85.4	2.0	86.8	Morgan Bros., Galva, Ill., Henry.....			Krug
7	R722	61.52	105.7	23.9	85.7	2.0	84.3	Geo. Steen, West Liberty, Muscatine.....			Steen Y. D.
8	H711	61.41	105.5	21.8	86.5	2.0	84.9	G. V. Harkrader, Adel, Dallas.....			Harkrader Dent
9	HH745	60.88	104.6	22.3	86.2	2.0	89.9	J. J. Feldman, Breda, Carroll.....			Feldman Y. D.
10	AA737	60.64	104.2	20.9	85.2	2.0	80.7				
11	W730	60.33	103.7	22.6	86.8	2.0	87.2				
12	750	59.67	102.5	26.0	86.5	2.0	78.6				
13	FF743	58.58	100.7	27.0	85.4	2.0	84.6				
14	723	58.23	100.1	20.1	84.5	2.0	86.0				
15	GG744	58.12	99.9	20.6	85.5	2.0	82.9				
16	751	57.43	98.7	23.7	85.5	2.0	91.4				
17	725	57.23	98.3	27.7	85.5	2.0	83.8				
18	726	56.44	97.0	29.3	86.6	2.0	85.8				
19	733	56.08	96.4	29.1	85.1	2.0	87.1				
20	746	55.69	95.7	26.2	86.6	2.0	85.3				
21	732	55.68	95.7	26.3	85.5	2.0	90.1				
22	Y735	55.05	94.6	26.9	85.8	2.0	81.4				
23	731	54.54	93.7	26.7	85.8	2.0	86.1				
24	749	53.89	92.6	26.3	86.4	2.0	84.4				
25	Z736	53.45	91.8	26.5	85.9	2.0	87.4				
26	U728	52.17	89.6	26.4	86.1	2.0	73.8				
27	721	50.70	87.1	26.5	86.2	2.0	87.1				
28	752	46.67	80.2	23.6	86.3	2.0	89.7				

District Number Seven (Continued)

Rank	Entry	Acro Yield		Moisture %	Shelling %	Testling	Sound %	Name	Address	County	Variety
		Bu. % of Av.									
								Hybrid Class			
1	M714	78.27	126.7	27.8	86.9	2.0	88.3	F. C. & U. B. D. A., Ames, Story			278 x 279
2	L715	74.82	115.4	25.8	85.8	2.0	87.8	F. C. & U. B. D. A., Ames, Story			274 x 276
3	V728	71.27	100.9	28.8	83.7	2.0	88.8	Genesee Section, Ames, Story			No. 1
4	B733	78.17	108.2	22.3	84.7	2.0	89.8	Hi-Bred Corn Co. by Collins, Menlo, Guthrie			Hi-Bred C11
5	Q726	79.69	109.1	22.7	84.4	2.0	89.2	Hi-Bred Corn Co. by Newlin, Grimes, Polk			Hi-Bred N1
6	T712	69.40	107.4	18.7	87.9	2.0	90.6	Hi-Bred Corn Co. by Cassidy, Grimes, Polk			C1
7	T81	89.34	107.0	22.8	84.3	2.0	80.2	Hi-Bred Corn Co. by Collins, Menlo, Guthrie			Hi-Bred C29
8	T713	69.91	104.9	23.0	86.8	2.0	94.1	Hi-Bred Corn Co. by Cassidy, Grimes, Polk			C3
9	Q718	67.10	102.5	22.4	85.2	2.0	84.0				
10	B708	66.83	102.1	22.5	85.5	2.0	89.8				
11	F709	65.77	101.4	22.2	84.3	2.0	88.8				
12	T81	64.74	99.8	19.5	87.4	2.0	84.3				
13	K714	63.48	97.9	22.8	85.2	2.0	85.2				
14	J719	62.98	97.1	23.4	84.8	2.0	84.4				
15	G710	62.87	97.0	19.9	82.8	2.0	88.2				
16	T717	61.85	95.4	29.8	86.1	2.0	89.7				
17	C706	61.25	94.9	22.9	84.4	2.0	90.7				
18	T81	60.30	92.0	24.5	87.1	2.0	80.1				
19	A704	58.98	92.5	27.2	84.7	2.0	85.7				
20	T49	58.32	91.5	23.9	85.8	2.0	82.8				
21	D0740	55.88	90.8	22.0	85.6	2.0	88.5				
22	N717	56.68	87.4	23.4	85.4	2.0	90.0				
23	D707	56.40	87.0	23.5	84.8	2.0	82.2				
24	C0729	55.75	86.0	28.3	85.6	2.0	83.8				

District Number Eight

Rank	Entry No.	Acre Yield		Moisture %	Shelling %	Lodging Grade	Stand %	Name	Address	County	Variety
		Bu.	% of Av.								
Open-pollinated Class											
1	Z853	85.89	113.6	25.7	85.3	2.2	82.6	Fred McCulloch, Hartwick, Iowa.....	McCulloch	Y. D.	
2	FF865	83.89	110.9	24.9	85.4	2.0	83.8	Clyde Black, Dallas Center, Dallas.....	Black	Y. D.	
3	BB860	83.36	110.2	25.1	85.1	2.1	85.7	Clarence Meyer, Van Meter, Madison.....	Meyer	Y. D.	
4	828	83.20	110.0	24.9	85.5	2.1	83.5	A. S. Beary, Albion, Marshall.....	Beary	Y. D.	
5	870	82.99	109.7	25.3	85.1	2.1	83.3	F. W. Perry, Zearing, Story.....	R. Y. D. & Krug		
6	827	82.69	109.3	23.3	85.2	2.2	77.9	Brenton Bros., Dallas Center, Dallas.....	Reid	Y. D.	
7	AA856	82.23	108.7	23.8	85.7	2.0	81.4	A. Wilson, Harlan, Shelby.....	Wilson	Y. D.	
8	HH867	81.53	107.8	22.2	86.1	1.9	86.0	J. J. Feldman, Breda, Carroll.....	Feldman	Y. D.	
9	849	81.14	107.3	22.4	87.1	2.3	87.9	Henry Birkeland, Nevada, Story.....	B. Reid	Y. D.	
10	W850	80.94	107.0	23.7	86.2	2.0	83.6	Henry Birkeland, Nevada, Story.....	H. Reid	Y. D.	
11	S826	80.71	106.7	22.9	85.3	2.4	81.4	Lester Pfister, El Paso, Ill., Woodford.....	Pfister	Krug	
12	H809	79.67	105.4	22.8	86.6	2.0	85.6	G. V. Harkrader, Adel, Dallas.....	Harkrader	Dent	
13	820	79.62	105.3	23.8	86.4	1.9	84.2				
14	869	79.41	105.0	25.9	86.4	2.2	79.4				
15	873	78.22	103.4	26.7	84.4	2.0	86.4				
16	808	78.18	103.4	24.2	83.9	2.3	87.2				
17	858	77.83	102.9	24.6	85.6	2.0	87.4				
18	872	77.09	101.9	24.8	85.1	2.3	82.4				
19	868	76.87	101.7	23.4	83.5	2.2	79.0				
20	Y852	76.19	100.8	24.4	85.7	2.1	73.5				
21	EE864	76.13	100.7	25.2	84.7	2.1	78.9				
22	863	75.63	100.0	21.2	85.2	2.3	78.9				
23	X851	75.08	99.3	26.3	83.3	2.2	87.6				
24	R821	73.67	97.4	22.3	85.2	2.0	79.4				
25	819	73.23	96.8	25.4	85.2	2.2	76.4				
26	GG866	73.04	96.6	20.7	84.8	2.1	81.8				
27	859	73.02	96.6	22.2	86.1	2.2	80.1				
28	854	72.22	95.5	19.5	86.5	2.2	85.8				
29	848	71.86	95.0	22.0	86.4	2.3	75.7				
30	822	71.09	94.0	25.1	84.6	2.3	80.6				
31	U841	70.64	93.4	26.4	85.3	2.1	71.4				
32	855	69.17	91.5	20.5	87.0	2.2	81.5				
33	871	63.85	84.4	21.6	85.8	2.3	81.0				
34	825	63.27	83.7	22.8	85.2	2.1	53.2				
35	874	60.35	79.8	25.8	84.3	2.2	53.1				
36	857	48.54	64.2	23.6	84.2	2.2	46.5				

District Number Eight (Continued)

Rank	Entry No.	Acro Yield		Moisture %	Shelling %	Lodging Grade	Stand %	Name	Address	County	Variety
		Bu.	% of Av.								
Hybrid Class											
1	835	96.79	115.0	25.9	84.2	1.9	91.1	U. S. D. A., Washington, D. C.			3856 x 3857
2	V842	94.02	111.7	26.1	83.5	1.9	88.9	Genetics Section, Ames, Story			No. 1
3	M814	93.92	111.6	23.3	84.3	1.7	91.8	F. C. & U. S. D. A., Ames, Story			378 x 379
4	O816	92.86	110.3	21.2	85.8	2.0	82.5	Hi-Bred Corn Co. by Casady, Grimes, Polk			H2
5	E805	92.05	109.4	21.5	85.3	1.7	89.4	Hi-Bred Corn Co. by Collins, Menlo, Guthrie			Hi-Bred C14
6	L810	91.87	109.1	19.7	88.0	2.1	92.8	Hi-Bred Corn Co. by Casady, Grimes, Polk			C1
7	834	91.32	108.5	22.8	84.9	2.1	86.3	U. S. D. A., Washington, D. C.			3854 x 3855
8	J811	91.23	108.4	21.4	86.9	1.9	86.5	Hi-Bred Corn Co. by Casady, Grimes, Polk			C5
9	843	89.51	106.3	20.4	84.7	2.1	84.3	Genetics Section, Ames, Story			No. 2
10	844	89.43	106.2	22.7	85.5	2.0	85.4	Genetics Section, Ames, Story			No. 3
11	837	88.67	105.3	27.9	83.2	2.2	93.2	U. S. D. A., Washington, D. C.			3867 x 3868
12	T840	88.43	105.1	21.6	86.0	2.0	86.5	Hi-Bred Corn Co. by Baker, Grimes, Polk			B1
13	F806	88.01	104.6	22.9	84.8	1.7	87.1	Hi-Bred Corn Co. by Collins, Menlo, Guthrie			Hi-Bred C15
14	L813	87.26	103.7	25.4	84.1	2.0	86.3				
15	P817	86.25	102.5	24.1	86.1	2.0	86.9				
16	833	86.15	102.4	27.3	85.0	2.4	84.2				
17	N815	86.10	102.3	23.0	85.9	2.1	85.8				
18	G807	85.00	101.0	20.2	83.4	2.0	83.8				
19	D804	84.95	100.9	22.4	85.6	1.8	79.0				
20	836	84.70	100.6	24.7	81.5	1.9	81.9				
21	Q818	84.59	100.5	21.0	87.0	1.9	83.1				
22	823	84.20	100.0	20.0	86.9	2.1	83.3				
23	845	82.79	98.4	26.1	85.6	2.2	80.6				
24	K812	82.61	98.1	23.9	84.8	1.9	83.9				
25	829	82.51	98.0	22.8	82.6	1.9	77.4				
26	B802	82.47	98.0	23.1	84.5	1.9	83.9				
27	A801	82.15	97.6	26.1	84.7	2.0	80.3				
28	846	81.81	97.2	28.3	85.4	1.5	77.4				
29	C803	80.17	95.2	29.7	85.0	2.1	87.9				
30	839	78.11	92.8	23.1	84.9	2.0	81.0				
31	832	77.90	92.6	23.0	84.7	2.2	81.9				
32	824	77.04	91.5	24.5	85.6	1.9	73.2				
33	830	76.18	90.5	24.4	84.7	1.7	81.8				
34	DD862	75.87	90.1	21.6	85.8	1.9	85.7				
35	831	72.69	86.4	31.4	82.4	2.6	84.3				
36	847	72.60	86.3	23.0	84.6	2.2	79.7				
37	CC861	69.59	82.7	24.9	84.0	1.9	72.4				
38	838	66.71	79.3	27.0	82.4	2.2	79.4				

District Number Nine

Rank	Entry No.	Acre Yield		Moisture %	Shelling %	Lodging Grade	Stand %	Name	Address	County	Variety
		Bu.	% of Av.								
Open-pollinated Class											
1	927	96.23	109.1	28.2	85.4	3.4	84.9	A. S. Beary, Albion, Marshall.....	Beary	Y. D.	
2	HH947	93.87	106.4	26.0	86.0	3.1	85.1	J. J. Feldman, Breda, Carroll.....	Feldman	Y. D.	
3	BB939	93.58	106.1	27.6	85.0	3.2	80.0	Clarence Meyer, Van Meter, Madison.....	Meyer,	Y. D.	
4	924	93.25	105.7	24.1	86.8	3.3	82.9	R. B. Blinks, Marion, Linn.....	Reid	Y. D.	
5	AA937	92.92	105.3	27.3	85.5	3.2	77.1	A. Wilson, Harlan, Shelby.....	Wilson	Y. D.	
6	Z936	92.04	104.3	27.9	85.4	3.2	80.7	Fred McCulloch, Hartwick, Iowa.....	McCulloch	Y. D.	
7	W931	91.69	103.9	25.4	86.7	3.3	77.9	Henry Birkeland, Nevada, Story.....	H. Reid	Y. D.	
8	943	91.29	103.5	26.6	87.4	3.2	81.0	John C. Adams, Marion, Linn.....	Reid	Utility	
9	901	90.73	102.8	28.3	86.0	2.9	82.1				
10	FF945	90.25	102.3	28.3	83.7	3.2	82.8				
11	H909	89.36	101.3	25.6	86.7	2.8	77.2				
12	922	89.32	101.2	28.1	85.8	3.6	75.1				
13	S926	87.60	99.3	27.5	85.4	3.1	80.6				
14	EE944	87.39	99.0	27.6	86.2	3.3	78.3				
15	932	87.33	99.0	27.4	85.4	2.7	79.6				
16	948	87.05	98.7	25.0	85.4	2.9	78.3				
17	R923	86.64	98.2	27.2	85.2	2.7	81.4				
18	U929	85.30	96.7	24.8	84.3	3.0	70.8				
19	933	84.26	95.5	23.2	86.7	3.3	79.2				
20	925	84.03	95.2	25.8	84.6	3.1	82.1				
21	GG946	83.65	94.8	22.9	84.6	3.1	77.6				
22	Y935	82.34	93.3	28.2	84.3	3.1	76.0				
23	X934	79.02	89.6	29.4	83.4	3.4	78.6				
24	938	78.57	89.0	24.0	86.1	2.7	74.2				

District Number Nine (Continued)

Rank	Entry No.	Acre Yield		Moisture %	Shelling %	Lodging Grade	Stand %	Name	Address	County	Variety
		Bu. % of Av.									
Hybrid Class											
1	I910	113.35	113.8	23.4	88.3	2.4	87.6	Hi-Bred Corn Co. by Casady, Grimes, Polk.....			C1
2	J911	108.46	108.9	24.9	86.5	2.8	77.1	Hi-Bred Corn Co. by Casady, Grimes, Polk.....			C5
3	P920	108.05	108.5	26.2	86.7	2.2	86.0	Hi-Bred Corn Co. by Casady, Grimes, Polk.....			H4
4	T928	107.95	108.4	27.0	86.0	2.3	83.9	HiBred Corn Co. by Baker, Grimes, Polk.....			B1
5	L913	106.18	106.6	27.6	82.9	2.7	87.4	F. C. & U. S. D. A., Ames, Story.....		274 x 276	
6	V930	105.18	105.6	30.1	84.0	2.9	84.4	Genetics Section, Ames, Story.....			No. 1
7	O919	105.10	105.5	23.8	85.7	2.9	78.8	Hi-Bred Corn Co. by Casady, Grimes, Polk.....			H2
8	Q921	104.73	105.1	25.4	87.5	2.5	87.1	Hi-Bred Corn Co. by Newlin, Grimes, Polk.....			Hi-Bred N1
9	916	102.70	103.1	29.7	83.2	2.0	83.9				
10	K912	101.35	101.7	27.9	84.9	2.6	84.6				
11	B903	100.89	101.3	24.8	84.9	2.8	86.4				
12	D905	99.74	100.1	27.2	85.4	2.6	83.8				
13	C904	99.71	100.1	26.5	84.8	2.5	84.2				
14	E906	98.55	98.9	26.6	85.2	2.5	85.8				
15	F907	98.12	98.5	26.1	85.0	2.4	85.1				
16	G908	96.91	97.3	24.3	83.5	3.0	80.1				
17	A902	96.20	96.6	27.9	84.1	2.8	79.3				
18	949	95.91	96.3	27.5	84.3	3.0	88.2				
19	917	95.60	96.0	36.4	84.4	2.6	81.1				
20	M914	95.36	95.7	33.0	84.6	2.4	81.0				
21	915	92.84	93.2	30.5	83.5	2.4	86.7				
22	DD942	91.16	91.5	26.4	85.8	2.8	77.6				
23	N918	90.51	90.9	26.9	85.9	2.7	77.6				
24	941	88.89	89.2	24.5	85.7	2.3	77.2				
25	CC940	86.87	87.2	27.8	85.0	2.6	76.3				

District Number Ten

Rank	Entry No.	Acre Yield		Moisture %	Shelling %	Lodging Grade	Stand %	Name	Address	County	Variety
		Bu.	% of Av.								
Open-pollinated Class											
1	1033	82.46	111.0	23.0	86.2	2.8	83.9	Miles Roberts, Villisca, Montgomery			Krug
2	X1030	80.33	108.1	25.1	85.4	2.9	86.3	Clarence Meyer, Van Meter, Madison			Meyer Y. D.
3	O1019	80.00	107.7	25.1	86.4	3.3	84.7	J. H. Petty, Elliott, Montgomery			Imp. R. Y. D.
4	1037	79.16	106.5	25.6	87.0	3.1	83.9	L. U. Newport, Panora, Guthrie			Imp. R. Y. D.
5	S1024	78.55	105.7	25.7	85.3	2.9	81.9	Henry Field Seed Co., Shenandoah, Page			Utility Yel.
6	V1027	78.34	105.4	24.1	85.9	3.0	83.9	Fred McCulloch, Hartwick, Iowa			McCulloch Y. D.
7	1032	78.21	105.3	23.9	86.4	3.0	86.7	Miles Roberts, Villisca, Montgomery			Corn Crib
8	AA1038	77.08	103.7	27.2	85.8	3.1	81.0	J. A. Renander, Essex, Page			Reid Y. D.
9	Z1036	76.95	103.6	24.7	85.8	3.7	78.9	Claude E. Wilson, Henderson, Mills			Reid Y. D.
10	1017	76.49	102.9	21.7	85.6	2.8	82.4				
11	1034	76.36	102.8	25.2	86.9	3.5	83.5				
12	Y1035	76.24	102.6	24.7	85.0	3.1	86.5				
13	1018	74.90	100.8	27.9	84.8	3.3	84.7				
14	1014	74.61	100.4	25.4	85.2	3.2	77.6				
15	N1016	74.27	100.0	24.8	85.7	3.1	77.1				
16	U1026	73.87	99.4	25.5	85.8	2.9	79.6				
17	T1025	72.39	97.4	25.7	84.9	3.3	87.4				
18	D1004	70.97	95.5	25.2	85.7	3.2	79.2				
19	1031	70.44	94.8	28.0	86.2	3.1	82.8				
20	1041	70.42	94.8	24.6	86.6	2.9	64.7				
21	1023	69.67	93.8	28.2	86.1	3.4	84.6				
22	W1028	69.06	92.9	24.7	85.5	3.2	80.6				
23	1005	68.05	91.6	29.8	84.0	3.5	84.6				
24	1040	67.98	91.5	27.1	84.9	2.9	82.6				
25	1029	67.67	91.1	26.3	87.9	3.1	75.8				
26	1039	67.24	90.5	26.2	86.0	2.6	80.3				

District Number Ten (Continued)

Rank	Entry No.	Acre Yield		Moisture %	Shelling %	Lodging Grade	Stand %	Name	Address	County	Variety
		Bu.	% of Av.								
Hybrid Class											
1	I1010	90.07	110.5	21.5	86.8	3.3	85.8	Hi-Bred Corn Co. by Casady, Grimes, Polk.....			H1
2	E1006	88.91	109.1	18.5	88.6	2.5	85.6	Hi-Bred Corn Co. by Casady, Grimes, Polk.....			C1
3	A1001	84.39	103.5	20.3	85.5	2.4	91.1	Hi-Bred Corn Co. by Collins, Menlo, Guthrie.....			Hi-Bred C11
4	Q1021	83.88	102.9	19.3	87.0	2.5	84.6	Hi-Bred Corn Co. by Baker, Grimes, Polk.....			B2
5	L1013	83.65	102.6	26.3	85.5	3.2	83.2	F. C. & U. S. D. A., Ames, Story.....			397 x 398
6	G1008	83.52	102.5	22.4	86.4	2.8	84.4				
7	H1009	83.19	102.0	23.3	87.2	2.6	85.4				
8	K1012	83.05	101.9	28.5	85.8	3.2	81.5				
9	P1020	82.01	100.6	24.0	86.4	2.6	84.7				
10	B1002	80.67	99.0	22.5	85.4	2.4	86.0				
11	J1011	80.18	98.4	25.4	85.3	2.6	77.9				
12	C1003	77.33	94.9	23.7	86.3	2.4	84.3				
13	F1007	76.39	93.7	23.4	85.5	2.5	86.0				
14	R1022	74.47	91.4	23.7	87.6	2.5	84.6				
15	M1015	71.04	87.1	28.3	87.2	3.0	83.1				

District Number Eleven

Rank	Entry No.	Acre Yield		Moisture %	Shelling %	Lodging Grade	Stand %	Name	Address	County	Variety
		Bu.	% of Av.								
Open-pollinated Class											
1	X1130	74.95	109.2	27.3	86.3	2.1	81.7	Clarence Meyer, Van Meter, Madison.....			Meyer Y. D.
2	Y1133	74.75	108.9	27.6	85.8	2.1	81.3	Clyde Black, Dallas Center, Dallas.....			Black Y. D.
3	1116	74.20	108.1	26.3	85.8	2.0	76.3	S. B. Hudson & Son, Knoxville, Marion.....			Krug
4	N1117	73.19	106.6	24.8	86.1	2.4	83.3	Lester Pfister, El Paso, Ill., Woodford.....			Pfister Krug
5	1139	72.79	106.0	27.1	86.0	2.2	81.1	I. C. Walker, Indianola, Warren.....			Krug
6	1132	72.27	105.3	28.6	86.2	2.4	84.2	Walter Russell, Indianola, Warren.....			Imp. R. Y. D.
7	W1129	71.87	104.7	25.3	85.8	2.5	81.0	A. Wilson, Harlan, Shelby.....			Wilson Y. D.
8	1123	71.67	104.4	25.3	86.9	2.2	84.9				
9	1124	70.91	103.3	29.2	86.0	2.2	81.8				
10	D1104	69.89	101.8	26.9	86.5	2.1	77.1				
11	1118	69.32	101.0	26.5	86.1	2.4	80.7				
12	S1125	68.99	100.5	26.9	85.9	2.4	84.0				
13	Z1135	68.47	99.7	28.6	85.8	2.4	79.2				
14	T1126	68.30	99.5	27.5	85.0	2.2	83.1				
15	U1127	67.45	98.2	27.6	87.2	2.3	75.3				
16	O1119	65.66	95.6	28.8	86.7	2.2	77.8				
17	V1128	65.15	94.9	27.6	86.2	2.2	82.8				
18	1131	63.18	92.0	28.3	85.6	2.3	77.1				
19	AA1136	62.88	91.6	31.0	86.5	2.4	82.4				
20	1137	62.34	90.8	30.7	85.3	1.9	84.4				
21	1134	53.64	78.1	17.4	86.5	2.3	77.8				

District Number Eleven (Continued)

Rank	Entry No.	Acre Yield		Moisture %	Shelling %	Lodging Grade	Stand %	Name	Address	County	Variety
		Bu.	% of Av.								
Hybrid Class											
1	K1113	84.59	110.1	29.1	87.1	2.2	84.3	F. C. & U. S. D. A., Ames, Story.....			276 x 277
2	G1109	84.26	109.7	23.5	87.4	2.1	85.7	Henry Field Seed Co., Shenandoah, Page.....			F2-Imp. Mule
3	J1112	84.24	109.7	29.2	87.1	2.0	84.4	Hi-Bred Corn Co. by Casady, Grimes, Polk.....			H6
4	I1111	82.13	106.9	25.4	87.4	2.2	87.8	Hi-Bred Corn Co. by Casady, Grimes, Polk.....			H1
5	E1105	81.75	106.4	20.9	86.6	2.0	84.6	Hi-Bred Corn Co. by Casady, Grimes, Polk.....			C1
6	C1103	81.18	105.7	24.8	86.5	2.0	81.1	Hi-Bred Corn Co. by Collins, Menlo, Guthrie.....			Hi-Bred C13
7	L1114	79.44	103.4	29.0	85.7	2.1	85.1				
8	P1120	78.55	102.3	27.8	86.6	2.1	87.1				
9	Q1121	78.47	102.2	24.2	87.4	2.0	81.3				
10	1107	78.26	101.9	28.4	85.0	2.1	75.7				
11	F1106	77.54	101.0	24.3	86.8	2.1	84.9				
12	H1110	76.85	100.1	25.5	86.9	2.0	76.3				
13	B1102	74.39	96.9	25.7	85.9	2.1	82.2				
14	A1101	73.81	96.1	24.6	85.4	2.4	85.1				
15	R1122	70.34	91.6	26.5	88.4	2.2	77.8				
16	1138	68.84	89.6	29.5	86.2	2.8	82.9				
17	1108	68.52	89.2	24.2	85.0	2.2	82.2				
18	M1115	59.16	77.0	32.6	85.6	2.1	76.1				

District Number Twelve

Rank	Entry No.	Acre Yield		Moisture %	Shelling %	Lodging Grade	Stand %	Name	Address	County	Variety
		Bu.	% of Av.								
Open-pollinated Class											
1	X1229	70.84	111.3	25.3	86.8	2.1	72.4	Clarence Meyer, Van Meter, Madison.....			Meyer Y. D.
2	1227	69.34	108.9	29.3	85.9	2.1	74.2	J. M. Maxwell & Son, Crawfordsville, Washington.....			R. Y. D. No. 1
3	1230	68.97	108.3	25.6	86.8	2.1	71.3	Thos. Thompson, Villisca, Montgomery.....			Krug
4	Z1238	68.84	108.1	25.6	86.5	2.1	71.7	Claude E. Wilson, Henderson, Mills.....			Reid Y. D.
5	V1225	68.40	107.4	24.2	85.8	2.1	73.5	Fred McCulloch, Hartwick, Iowa.....			McCulloch Y. D.
6	N1216	67.06	105.3	23.5	85.9	2.2	69.7	Lester Pfister, El Paso, Ill., Woodford.....			Pfister Krug
7	1214	66.21	104.0	22.6	86.7	2.1	73.9	Geo. Steen, West Liberty, Muscatine.....			Steen Y. D.
8	W1226	65.76	103.3	25.1	85.8	2.0	70.1	A. Wilson, Harlan, Shelby.....			Wilson Y. D.
9	Y1235	64.62	101.5	25.8	85.6	2.1	70.8				
10	O1218	64.04	100.6	28.8	85.9	2.2	67.5				
11	1228	64.03	100.6	29.3	86.3	2.2	76.8				
12	1201	63.60	99.9	25.6	86.4	2.2	65.7				
13	1234	63.47	99.7	25.4	86.6	2.1	65.3				
14	S1222	63.43	99.6	26.7	85.1	2.2	70.7				
15	U1224	63.13	99.2	27.3	85.9	2.2	64.9				
16	1217	63.04	99.0	28.0	85.4	2.1	74.9				
17	1239	62.57	98.3	24.8	86.8	2.5	63.8				
18	1232	61.66	96.9	28.2	86.3	2.0	68.5				
19	1236	61.26	96.2	20.7	84.9	2.2	73.9				
20	AA1240	60.61	95.2	28.3	86.4	2.1	71.9				
21	1241	60.41	94.9	28.5	85.3	2.1	70.7				
22	D1205	60.28	94.7	26.3	86.2	2.1	69.0				
23	T1223	58.60	92.1	26.0	84.5	2.4	71.5				
24	1233	56.76	89.2	28.9	86.0	2.1	60.8				
25	1237	54.51	85.6	26.2	86.1	2.3	51.5				

District Number Twelve (Continued)

Rank	Entry No.	Acre yield		Moisture %	Shelling %	Lodging grade	Stand %	Name	Address	County	Variety
		Bu.	% of Av.								
Hybrid Class											
1	H1209	75.98	111.1	26.7	87.8	2.1	70.3	Henry Field Seed Co., Shenandoah, Page.....			F5-Imp. Mule
2	I1210	73.77	107.8	23.2	86.8	2.0	79.6	Hi-Bred Corn Co. by Casady, Grimes, Polk.....			H1
3	G1208	73.42	107.3	23.5	86.8	2.0	72.8	Henry Field Seed Co., Shenandoah, Page.....			F2-Imp. Mule
4	C1204	72.04	105.3	23.7	85.8	2.0	70.6	Hi-Bred Corn Co. by Collins, Menlo, Guthrie.....			Hi-Bred C13
5	J1211	72.03	105.3	28.7	87.3	2.0	66.1	Hi-Bred Corn Co. by Casady, Grimes, Polk.....			H6
6	B1203	70.12	102.5	23.6	85.5	2.0	71.0	Hi-Bred Corn Co. by Collins, Menlo, Guthrie.....			Hi-Bred C12
7	E1206	69.92	102.2	22.4	88.6	2.0	78.9				
8	P1219	69.76	102.0	26.8	86.2	2.0	72.4				
9	1242	68.73	100.5	27.5	85.8	2.1	64.9				
10	A1202	67.48	98.6	22.4	85.9	2.0	73.2				
11	F1207	67.19	98.2	23.5	85.8	2.0	70.4				
12	1231	66.75	97.6	29.2	85.1	2.0	63.2				
13	R1221	65.84	96.2	26.5	87.9	2.0	69.0				
14	L1213	65.26	95.4	29.7	85.7	2.2	71.4				
15	Q1220	63.73	93.2	24.8	87.0	2.1	61.9				
16	K1212	62.72	91.7	27.7	85.0	2.2	65.7				
17	M1215	58.20	85.1	29.5	86.1	2.2	61.3				

TABLE IV. PERFORMANCE OF STRAINS WHICH WERE ENTERED IN ALL THREE DISTRICTS OF A SECTION
Northern Section

Rank	Entry No.	Acre yield		Moisture %	Shelling %	Lodging grade	Stand %	Name	Address	County	Variety
		Bu.	% of Av.								
Open-pollinated Class											
1	J	61.81	111.3	20.2	84.7	2.2	81.7	Wm. McArthur, Mason City, Cerro Gordo.....			Golden King
2	H	60.73	109.4	21.0	84.4	2.4	80.2	Stuart N. Smith, Granville, O'Brien.....			Early Ioleaming
3	G	57.77	104.0	24.8	83.0	2.4	79.6				
4	A	57.69	103.9	21.6	84.2	2.4	80.2				
5	I	56.53	101.8	20.9	84.2	2.5	82.8				
6	F	49.50	89.1	29.0	82.8	2.5	72.5				
Hybrid Class											
1	M	70.61	107.3	19.4	85.6	2.2	85.2	Turner & Wallace, Paton, Greene.....			Hi-Bred T3
2	E	70.03	106.4	29.1	85.1	2.5	82.3	F. C. & U. S. D. A., Ames, Story.....			381 x 382
3	C	69.21	105.2	22.7	85.4	2.3	85.3	Hi-Bred Corn Co. by Newlin, Grimes, Polk.....			W1
4	D	68.19	103.6	19.8	82.4	3.2	82.3				
5	N	67.33	102.3	23.3	84.3	2.2	81.2				
6	L	62.79	95.4	26.0	82.8	2.0	80.0				
7	B	62.56	95.1	23.9	83.9	2.1	76.3				
8	K	57.81	87.8	26.3	83.0	1.9	66.2				

North Central Section

Rank	Entry No.	Acre yield		Moisture %	Shelling %	Lodging grade	Stand %	Name	Address	County	Variety
		Bu.	% of Av.								
Open-pollinated Class											
1	D	76.26	108.5	29.6	85.2	2.8	88.3	H. F. Osterland, Faulkner, Franklin.....			Osterland Y. D.
2	R	75.57	107.6	28.8	84.4	3.1	85.6	Roy J. Clampitt, New Providence, Hardin.....			Reid Y. D.
3	S	72.65	103.4	28.0	84.8	2.8	84.2	Fred N. Rupp, Cherokee, Cherokee.....			Krug
4	O	72.55	103.3	30.2	84.3	2.7	85.4				
5	Q	71.08	101.2	29.4	84.2	3.1	82.5				
6	U	70.89	100.9	24.5	83.6	2.6	86.9				
7	T	69.95	99.6	25.8	83.8	2.9	81.5				
8	V	68.37	97.3	20.7	85.4	2.7	86.0				
Hybrid Class											
1	M	87.71	114.5	25.6	85.4	2.4	87.5	Hi-Bred Corn Co. by Casady, Grimes, Polk.....			H5
2	E	87.46	114.1	26.3	86.1	1.8	89.8	Hi-Bred Corn Co. by Newlin, Grimes, Polk.....			C2
3	J	84.39	110.1	29.9	83.9	1.6	88.9	Henry Field Seed Co., Shenandoah, Page.....			F1-Imp. Mule
4	L	82.66	107.9	26.3	85.2	1.6	87.1	Hi-Bred Corn Co. by Casady, Grimes, Polk.....			H3
5	G	81.80	106.8	21.8	86.7	2.3	89.2	Hi-Bred Corn Co. by Newlin, Grimes, Polk.....			W1
6	A	80.83	105.5	25.7	85.9	2.2	81.2				
7	N	78.96	103.0	26.9	85.7	1.9	87.1				
8	B	77.99	101.8	28.8	84.0	2.1	85.8				
9	H	77.51	101.2	26.5	86.3	3.1	85.1				
10	C	76.51	99.8	28.3	83.1	2.2	86.0				
11	P	76.33	99.6	28.2	85.7	2.2	88.2				
12	I	75.90	99.1	27.0	84.7	2.6	79.4				
13	K	70.88	92.5	28.7	84.4	1.8	82.7				
14	F	50.66	66.1	27.7	86.9	2.5	77.9				

South Central Section

Rank	Entry No.	Acre yield		Moisture %	Shelling %	Lodging grade	Stand %	Name	Address	County	Variety
		Bu.	% of Av.								
Open-pollinated Class											
1	BB	80.69	109.0	26.1	85.1	2.4	84.1	Clarence Meyer, Van Meter, Madison.....			Meyer Y. D.
2	HH	78.76	106.4	23.5	86.1	2.3	87.0	J. J. Feldman, Breda, Carroll.....			Feldman Y. D.
3	AA	78.60	106.2	24.0	85.5	2.4	79.7	A. Wilson, Harlan, Shelby.....			Wilson Y. D.
4	W	77.65	104.9	23.9	86.6	2.4	82.9	Henry Birkeland, Nevada, Story.....			H. Reid Y. D.
5	FF	77.57	104.8	26.7	84.8	2.4	83.7	Clyde Black, Dallas Center, Dallas.....			Black Y. D.
6	S	77.28	104.4	25.7	85.4	2.5	82.9				
7	Z	77.13	104.2	26.7	85.5	2.5	83.6				
8	H	76.81	103.8	23.4	86.6	2.3	82.6				
9	EE	75.02	101.4	26.0	85.4	2.5	81.3				
10	R	73.94	99.9	24.5	85.4	2.2	81.7				
11	X	72.53	98.0	27.5	83.5	2.5	84.3				
12	GG	71.60	96.7	21.4	85.0	2.4	80.8				
13	Y	71.19	96.2	26.5	85.3	2.4	77.0				
14	U	69.37	93.7	25.9	85.2	2.4	72.0				
Hybrid Class											
1	I	91.61	110.6	20.6	88.1	2.2	90.3	Hi-Bred Corn Co. by Casady, Grimes, Polk.....			C1
2	V	90.16	108.8	28.3	83.8	2.3	87.4	Genetics Section, Ames, Story.....			No. 1
3	L	89.42	107.9	26.3	84.3	2.2	87.1	F. C. & U. S. D. A., Ames, Story.....			274 x 276
4	J	89.25	107.7	23.1	86.7	2.2	85.6	Hi-Bred Corn Co. by Casady, Grimes, Polk.....			C5
5	M	89.18	107.6	28.0	85.3	2.0	87.1	F. C. & U. S. D. A., Ames, Story.....			378 x 379
6	O	88.35	106.6	22.5	85.5	2.3	82.4	Hi-Bred Corn Co. by Casady, Grimes, Polk.....			H2
7	Q	86.47	104.3	23.0	87.0	2.1	86.5	Hi-Bred Corn Co. by Newlin, Grimes, Polk.....			Hi-Bred N1
8	T	86.08	103.9	26.1	86.0	2.1	86.7				
9	E	85.81	103.6	23.5	85.3	2.1	88.3				
10	P	85.75	103.5	24.6	86.5	2.1	86.4				
11	B	84.51	102.0	23.5	84.7	2.2	86.6				
12	F	83.97	101.3	23.7	84.7	2.0	87.0				
13	K	82.48	99.5	24.9	85.0	2.2	85.6				
14	G	81.59	98.5	21.5	83.4	2.3	84.1				
15	C	80.48	97.1	26.4	84.7	2.2	87.6				
16	D	80.36	97.0	24.4	85.3	2.1	82.0				
17	A	79.44	95.9	27.1	84.5	2.3	81.8				
18	N	77.76	93.8	25.1	85.7	2.3	84.5				
19	DD	75.80	90.9	23.3	85.7	2.2	83.9				
20	CC	70.74	85.4	26.3	84.9	2.2	77.6				

Southern Section

Rank	Entry No.	Acre yield		Moisture %	Shelling %	Lodging grade	Stand %	Name	Address	County	Variety
		Bu.	% of Av.								
Open-pollinated Class											
1	X	75.37	109.4	25.9	86.2	2.4	80.1	Clarence Meyer, Van Meter, Madison.....			Meyer Y. D.
2	Y	71.87	104.4	26.0	85.5	2.4	79.5	Clyde Black, Dallas Center, Dallas.....			Black Y. D.
3	N	71.51	103.8	24.4	85.9	2.6	76.7	Lester Pfister, El Paso, Ill., Woodford.....			Pfister Krug
4	Z	71.42	103.7	26.3	86.0	2.7	76.6	Claude E. Wilson, Henderson, Mills.....			Reid Y. D.
5	V	70.63	102.6	25.3	85.9	2.4	80.1				
6	S	70.32	102.1	26.4	85.4	2.5	78.9				
7	O	69.90	101.5	27.6	86.3	2.6	76.7				
8	W	68.90	100.0	25.0	85.7	2.6	77.2				
9	U	68.15	99.0	26.8	86.3	2.5	73.3				
10	D	67.05	97.4	26.1	86.1	2.5	75.1				
11	AA	66.86	97.1	28.8	86.2	2.5	78.4				
12	T	66.43	96.5	26.4	84.8	2.6	80.7				
Hybrid Class											
1	I	81.99	108.5	23.4	87.0	2.5	84.4	Hi-Bred Corn Co. by Casady, Grimes, Polk.....			H1
2	G	80.40	106.4	23.1	86.9	2.3	81.0	Henry Field Seed Co., Shenandoah, Page.....			F2-Imp. Mule
3	E	80.19	106.1	20.6	87.9	2.2	81.4	Hi-Bred Corn Co. by Casady, Grimes, Polk.....			C1
4	J	78.82	104.3	27.8	86.5	2.2	76.1	Hi-Bred Corn Co. by Casady, Grimes, Polk.....			H6
5	H	78.67	104.1	25.2	87.3	2.2	77.3	Henry Field Seed Co., Shenandoah, Page.....			F5-Imp. Mule
6	C	76.85	101.7	24.1	86.2	2.1	78.3				
7	K	76.79	101.6	28.4	86.0	2.5	77.2				
8	P	76.77	101.6	26.2	86.4	2.2	81.4				
9	L	76.12	100.7	28.3	85.6	2.5	79.9				
10	Q	75.36	99.7	22.4	87.1	2.2	75.9				
11	A	75.23	99.6	22.4	85.6	2.3	83.1				
12	B	75.06	99.3	23.9	85.6	2.2	79.7				
13	F	73.71	97.5	23.7	86.0	2.2	80.4				
14	R	70.22	92.9	25.6	87.9	2.2	77.1				
15	M	62.80	83.1	30.1	86.3	2.4	73.5				

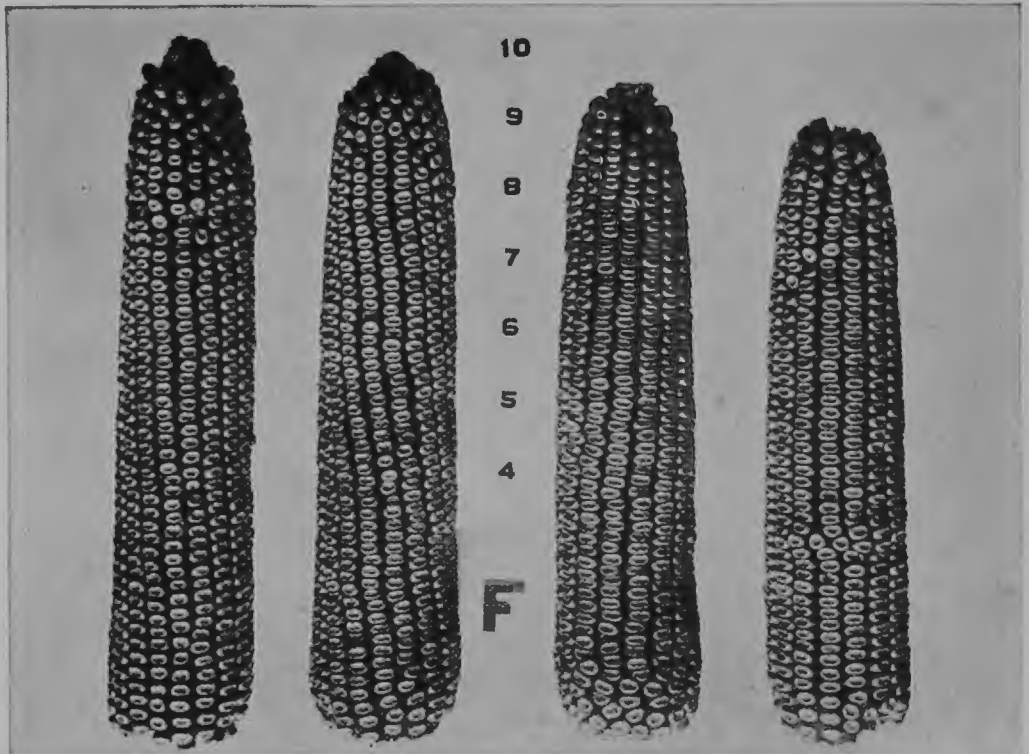


Fig. 6. Krug. This variety first gained prominence as a result of a yield test in Woodford County, Illinois, where it was originated by George Krug thru mass selection continued for a period of years. This variety can be expected to give satisfactory yields thruout central and southern Iowa. It is a little later in maturity than the average strain of central Iowa.

As the yield test continues, it is to be expected that new strains will be found that perhaps are better than anything previously tested. An outstanding example of this is found in the strain entered this year for the first time by Clarence Meyer of Van Meter. This made the unusual record of highest yield in both the South Central and Southern Sections. Moreover it made a very consistent yield in the different districts, being first in two districts, second in one, and third in three. The purpose of the yield test is to find such promising strains and to measure their relative yielding ability through a period of years.

Strain "No. 1" entered by the Genetics Section of the Iowa Agricultural Experiment Station was the result of using an inbred line of Lancaster Surecrop as a pollen parent on open-pollinated Krug as the seed producing, or female, parent.

SECTION YIELDS OF PREVIOUS YEARS

Relatively few strains have been entered in the three districts of a section for a large number of years. A relatively high yield in one or two tests often was considered sufficient evidence of the satisfactoriness of a strain, consequently it was not entered again. A strain which yielded relatively low, perhaps was replaced without further trial by one higher yielding.

The yield of a strain in percentage of the average of those compared, was used as an index of its relative productivity. The average of the index for 1929 and that for the last previous year entered was computed for each strain included as a section entry in the two-year comparison. Likewise the average of the index for 1929 and those for the last two previous years en-

TABLE V. NAMES OF THE GROWERS OF THE HIGHEST YIELDING THIRD ONLY, OF THE SECTION ENTRIES WITH THE AVERAGE PERCENTAGE YIELD FOR THE PERIOD OF YEARS INDICATED, EACH PERIOD INCLUDING 1929 AS ONE YEAR

Name of Entrants	Address	County	Strain	Average Percentage Yield								
				10 yrs.	9 yrs.	8 yrs.	7 yrs.	6 yrs.	5 yrs.	4 yrs.	3 yrs.	2 yrs.
Northern Section												
Wm. McArthur.....	Mason City.....	Cerro Gordo.....	Golden King.....	.....	.....	.....	108.8	109.2	108.9	109.3	111.0	112.1
North Central Section												
H. F. Osterland.....	Faulkner.....	Franklin.....	Osterland, Y. D....	103.3	103.4	103.2	103.1	.....	.....	.....	104.8	108.0
Roy J. Clampitt.....	New Providence....	Hardin.....	Reid Y. D.....	.....	.....	.....	.....	104.8	104.4	.....	.....	.....
Smith Bros.....	Center Junction....	Jones.....	Ioleaming.....	.....	.....	.....	.....	.....	.....	104.9	104.8	.....
South Central Section												
Lester Pfister.....	El Paso, Ill.....	Woodford.....	Pfister Krug.....	.....	.....	.....	.....	.....	.....	108.5	107.9	106.9
G. V. Harkrader.....	Adel.....	Dallas.....	Harkrader Y.D....	.....	.....	.....	.....	.....	.....	106.2	107.2	106.4
A. Wilson.....	Harlan.....	Shelby.....	Wilson Y. D.....	.....	.....	.....	.....	103.6	103.5	.....	105.0	105.4
McNeilly & Smith.....	Center Junction....	Jones.....	Ioleaming.....	.....	.....	.....	.....	.....	107.3	105.2	.....	.....
Geo. Steen.....	West Liberty.....	Muscatine.....	Steen Y. D.....	.....	.....	101.9	102.0	.....	.....	.....	.....	.....
Clyde Black.....	Dallas Center.....	Dallas.....	Black Y. D.....	102.9	102.0	.....	.....	.....	.....	.....	.....	.....
Southern Section												
Lester Pfister.....	El Paso, Ill.....	Woodford.....	Pfister Krug.....	.....	.....	.....	.....	.....	.....	.....	105.9	105.8
A. Wilson.....	Harlan.....	Shelby.....	Wilson Y. D.....	.....	.....	.....	.....	.....	102.3	.....	.....	102.7
Chas. D. Kirkpatrick.....	Keota.....	Keokuk.....	Walden Dent.....	102.9	.....	103.0	103.9	103.9	.....	103.3	102.6	.....
Fred McCulloch.....	Hartwick.....	Iowa.....	McCulloch Y. D....	102.9	102.4	.....	.....	.....	.....	.....	.....	.....

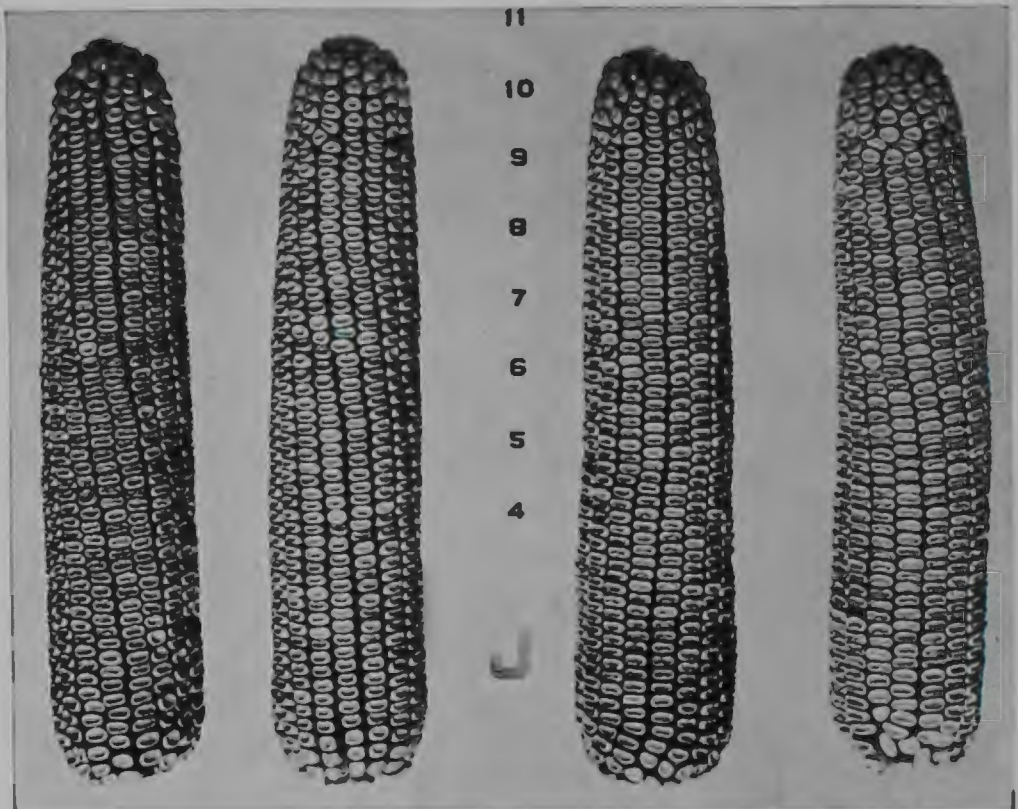


Fig. 7. Wilson Yellow Dent. A strain developed by A. Wilson of Shelby County. It has produced yields above the average in the six districts of south central and southern Iowa. Its best record was made in district 7, its home, where a considerable acreage is grown.

tered was computed for each strain included three years. A similar computation was made for each of the longer periods. A strain entered each year of the test is included in each period average. The strain must have been entered in 1929 to be included in any period. This gives a comparison between all 1929 strains which have been entered the same number of years although they may not be the same individual years. Data are given in table V for only the highest yielding third in each section.

COMPARISON OF OPEN-POLLINATED AND HYBRID STRAINS

There were 230 entries of hybrids involving one or more inbred lines in 1929. The average yield of the hybrids and of the open-pollinated strains, the highest and lowest yields of each class, and the differences between the two classes in each comparison, are shown for district and section entries in table VI.

The hybrids again compare quite favorably with the open-pollinated strains. The differences between the average yields of the two classes, if compared by districts, vary from 2.52 to 15.70 bushels an acre. The hybrid section entries are somewhat more consistent in their relative yields from field to field than the open-pollinated strains. The average yield of the hybrids is higher than that of the highest open-pollinated strain in each section. Hybrid entry "F" in the North Central Section yielded lowest in each of the three districts and in two districts its yield was far less than that of the lowest yielding open-pollinated strain. Attention is called to this entry in particular to emphasize the fact that not all hybrids are high

TABLE VI. COMPARATIVE YIELDS, AVERAGE, HIGH AND LOW, OF OPEN-POLLINATED (O-P) and HYBRID (H) STRAINS, AND THE DIFFERENCES BETWEEN OPEN-POLLINATED AND HYBRID, A PLUS BEING IN FAVOR OF THE HYBRID AND A MINUS IN FAVOR OF THE OPEN-POLLINATED IN THE 1929 IOWA CORN YIELD TEST

Dist. No.	Name of field	No. of entries		Mean acre yield, bu.			High acre yield, bu.			Low acre yield, bu.		
		O-P	H	O-P	H	Dif.	O P	H	Dif.	O-P	H	Dif.
All Entries												
1	Royal	20	10	60.72	66.83	+ 6.11	68.56	75.63	+ 7.07	50.89	49.50	— 1.39
2	Mason City	27	12	48.44	64.14	+15.70	53.79	71.29	+17.50	34.82	55.80	+20.48
3	Fredericksburg	12	8	57.43	66.49	+ 9.06	66.46	73.58	+ 7.12	48.30	54.43	+ 6.13
4	Storm Lake	30	29	85.00	92.66	+ 7.66	94.13	108.17	+14.04	78.94	63.07	—15.87
5	Goldfield	26	20	76.27	85.21	+ 8.94	88.45	98.36	+ 9.91	54.77	54.60	— 0.17
6	Ryan	11	14	49.51	52.03	+ 2.52	53.46	59.19	+ 5.73	45.74	34.31	—11.43
7	Harlan	28	24	58.20	64.83	+ 6.63	65.94	78.27	+12.33	46.67	55.75	+ 9.08
8	Ames	36	38	75.62	84.17	+ 8.55	85.89	96.79	+10.90	48.54	66.71	+18.17
9	West Branch	24	25	88.24	99.61	+11.37	96.23	113.35	+17.12	78.57	86.87	+ 8.30
10	Henderson	26	15	74.30	81.52	+ 7.22	82.46	90.07	+ 7.61	67.24	71.04	+ 3.80
11	Knoxville	21	18	68.66	76.80	+ 8.14	74.95	84.59	+ 9.64	53.64	59.16	+ 5.52
12	Mt. Pleasant	25	17	63.66	68.41	+ 4.75	70.84	75.98	+ 5.14	54.51	58.20	+ 3.69
Section Entries												
1	Royal	6	8	63.67	69.35	+ 5.68	68.56	75.63	+ 7.07	56.31	63.70	+ 7.39
2	Mason City	6	8	50.23	62.36	+12.13	53.40	71.29	+17.89	43.90	55.80	+11.40
3	Fredericksburg	6	8	58.12	66.49	+ 8.37	66.46	73.58	+ 7.12	48.30	54.43	+ 6.13
Section 4	.....	.....	.....	57.34	66.07	+ 8.73	61.81	70.61	+ 8.80	49.50	57.81	+ 8.31
4	Storm Lake	8	14	86.02	94.67	+ 8.65	92.96	108.17	+15.21	80.64	63.07	—17.57
5	Goldfield	8	14	80.16	86.79	+ 6.63	85.60	98.36	+12.76	75.32	54.60	—20.72
6	Ryan	8	14	50.32	52.03	+ 1.71	53.46	59.19	+ 5.73	47.21	34.31	—12.90
Section 7	.....	.....	.....	72.16	77.83	+ 5.57	76.26	87.71	+11.45	68.37	50.66	—17.71
7	Harlan	14	20	59.70	65.12	+ 5.42	65.12	78.27	+13.15	52.17	55.75	+ 3.58
8	Ames	14	20	78.78	85.97	+ 7.19	85.89	94.02	+ 8.13	70.64	69.59	+ 1.05
9	West Branch	14	20	88.26	100.72	+12.46	93.87	113.35	+19.48	79.02	86.87	+ 7.85
Section 10	.....	.....	.....	75.58	83.94	+ 8.36	80.69	91.61	+10.92	69.37	70.74	+ 1.37
10	Henderson	12	15	75.67	81.52	+ 5.85	80.33	90.07	+ 9.74	69.06	71.04	+ 1.98
11	Knoxville	12	15	69.30	77.78	+ 8.48	74.95	84.59	+ 9.64	62.88	59.16	— 3.72
12	Mt. Pleasant	12	15	64.63	68.50	+ 3.87	70.84	75.98	+ 5.14	58.60	58.20	— 0.40
Section 12	.....	.....	.....	69.87	75.93	+ 6.07	75.37	81.99	+ 6.62	66.43	62.80	— 3.63

yielding. Confidence should be placed only in those hybrids which have been thoroly tested.

The average yields of the hybrid section entries in percentage of the average yields of the open-pollinated section entries are shown in table VII for each district for the years 1926 to 1929 inclusive together with the average percentages both by districts and years.

TABLE VII. AVERAGE YIELD OF HYBRID SECTION ENTRIES IN PERCENTAGE OF THE AVERAGE YIELD OF OPEN-POLLINATED SECTION ENTRIES FOR THE YEARS 1926-1929 INCLUSIVE

District	1926 %	1927 %	1928 %	1929 %	Av. %
1	117.1	109.2	109.8	108.9	111.8
2	104.6	117.4	120.4	124.1	116.6
3	97.4	102.9	109.3	114.4	106.0
4	115.5	104.6	110.0	110.1	110.1
5	106.5	111.1	107.8	108.3	108.4
6	104.5	109.7	102.8	103.4	105.1
7	105.3	102.8	113.7	109.1	107.7
8	103.9	98.1	115.3	109.1	106.6
9	104.9	102.3	113.9	114.1	108.8
10	111.4	102.2	111.0	107.7	108.1
11	102.9	114.3	108.2	112.2	109.4
12	110.3	107.1	104.2	106.0	106.9
Average	107.0	106.8	110.5	110.6	108.7

During the four years 1926, 27, 28 and 29 the hybrids, in comparison with the open pollinated strains, yielded less in eastern Iowa than in central Iowa in 12 of the 16 comparisons. Again when the same comparison is made with the same strains in western Iowa they produced comparatively less in eastern Iowa in 8 of the 16 comparisons.

The hybrid section entries yielded 7.0 percent more than the open-pollinated section entries in 1926, 6.8 percent in 1927, 10.5 percent in 1928 and 10.6 percent in 1929. This would indicate that the hybrid section entries in 1928 and 1929 were somewhat better than those entered in 1926 and 1927.

FACTORS AFFECTING YIELD

The purpose of the Iowa Corn Yield Test is to find those strains which are inherently more productive than others. To accomplish this purpose it is necessary to control as many as possible of the variable environmental factors. Also it is desirable to study the characteristics of each strain in order to find possible explanations for differences in yield, and to know whether a strain may have desirable characters other than yield, such as, resistance to lodging, proper height of ear, and maturity in its locality.

The relations of yield to stand, moisture content at harvest, shelling percentage, lodging, and weight of ear are shown in table VIII. The entries were arranged in three groups in order of yield and the averages of the other characters computed for each group.

A uniform, or nearly uniform stand of plants is essential to a high degree of reliability. This factor was particularly noticeable in the 1929 test. A few entries produced a very low stand. It was not possible in such cases to make any satisfactory correction.

The average stand of the lowest yielding third in both the open-pollinated and hybrid classes was less than that of either the highest or middle yielding third in every district and in about one half of the comparisons it was much less.

Poor germination may be an inherent characteristic of a strain. More

probably it is the result of injury in the drying and storage or by disease. When entire hills are missing, the cause quite probably is mechanical. --It seems justifiable to make corrections for the missing hills. Corrections were made on the assumption that 10 percent of the loss due to a missing hill was made up by each surrounding hill. The data show that even after correction there is yet some relation between stand and yield. *It is very important therefore that the entrant be certain his seed will grow.*

TABLE VIII. YIELDS OF OPEN-POLLINATED AND HYBRID ENTRIES IN THE 1929 IOWA CORN YIELD TEST GROUPED INTO HIGHEST, MIDDLE, AND LOWEST YIELDING THIRDS TO INDICATE THRU THE AVERAGES FOR EACH GROUP THE POSSIBLE RELATION OF YIELD TO STAND, MOISTURE CONTENT, SHELLING PERCENTAGE, LODGING AND NUMBER OF EARS PER HUNDRED POUNDS

Dist. No.	Third	No. of entries	Acre yield		Stand %	Moisture %	Shelling %	Lodg- ing grade	Ears per Cwt.	
			Bu.	% of Av.						
OPEN-POLLINATED CLASS										
1.....	{	1	7	65.46	107.8	83.6	21.3	84.5	2.6	278
		2	6	61.65	101.5	83.1	23.6	83.9	2.8	277
		3	7	55.19	90.9	77.7	23.6	84.0	2.8	278
2.....	{	1	9	52.24	107.8	78.5	23.7	83.5	2.2	301
		2	9	49.14	101.5	79.1	24.3	83.3	2.3	303
		3	9	43.94	90.7	70.3	26.1	83.4	2.4	290
3.....	{	1	4	62.75	109.3	79.0	23.0	83.9	2.4	247
		2	4	57.01	99.3	79.3	25.0	83.6	2.4	277
		3	4	52.54	91.5	73.1	26.2	81.6	2.2	260
4.....	{	1	10	90.08	106.0	91.4	26.3	85.1	2.5	172
		2	10	84.56	99.5	89.1	24.5	84.8	2.6	176
		3	10	80.34	94.5	87.7	24.3	84.8	2.5	176
5.....	{	1	9	83.07	108.9	80.1	30.2	84.7	3.0	179
		2	8	78.41	101.2	79.4	28.5	84.8	3.0	183
		3	9	68.68	90.1	67.0	29.1	84.4	3.0	179
6.....	{	1	4	51.99	105.0	86.2	28.3	84.0	3.2	206
		2	3	49.14	99.3	82.3	26.7	84.4	3.1	207
		3	4	47.30	95.6	81.4	29.3	83.5	3.4	216
7.....	{	1	9	63.22	108.6	85.7	24.6	85.5	2.0	217
		2	10	58.28	100.2	84.8	24.7	85.7	2.0	225
		3	9	53.09	91.2	85.0	27.3	86.1	2.0	222
8.....	{	1	12	82.35	108.9	83.6	23.9	85.7	2.1	170
		2	12	76.99	101.8	82.0	24.4	85.0	2.1	184
		3	12	67.52	89.3	72.3	23.0	85.5	2.2	187
9.....	{	1	8	93.11	105.5	81.2	26.6	86.0	3.2	156
		2	8	88.63	100.5	79.3	27.2	85.6	3.1	159
		3	8	82.98	94.0	77.5	25.7	84.9	3.1	166
10.....	{	1	9	79.01	106.3	83.5	24.9	86.0	3.1	192
		2	8	74.89	100.8	82.4	25.1	85.5	3.2	182
		3	9	69.06	92.9	79.5	26.7	85.9	3.1	201
11.....	{	1	7	73.43	107.0	81.3	26.7	86.0	2.2	179
		2	7	69.65	101.5	81.5	27.3	86.0	2.3	178
		3	7	62.90	91.6	79.7	27.3	86.3	2.2	188
12.....	{	1	8	68.18	107.1	72.1	25.2	86.3	2.1	182
		2	9	63.55	99.8	68.9	26.9	86.0	2.2	185
		3	8	59.26	93.1	67.2	26.6	85.7	2.2	189

TABLE VIII (continued)

Dist. No.	Third	No. of entries	Acre yield		Stand %	Moisture %	Shelling %	Lodg- ing grade	Ears per Cwt.
			Bu.	% of Av.					
HYBRID CLASS									
1.....	1	3	73.16	109.5	88.5	23.6	85.7	2.7	266
	2	4	67.91	101.6	84.0	22.3	83.9	2.8	295
	3	3	59.06	88.4	74.1	27.2	82.8	2.3	275
2.....	1	4	70.17	109.4	82.9	23.5	85.3	2.3	255
	2	4	62.72	97.8	81.1	23.6	84.2	2.6	276
	3	4	59.55	92.9	76.9	25.5	83.1	1.9	281
3.....	1	3	72.59	109.2	81.7	24.6	84.2	2.0	241
	2	2	68.51	103.0	80.2	22.6	84.8	2.0	258
	3	3	59.04	88.8	67.3	25.5	82.9	1.7	233
4.....	1	10	99.38	107.3	95.2	23.7	85.9	1.9	190
	2	9	92.93	100.3	92.4	25.5	84.9	2.2	176
	3	10	85.70	92.5	92.0	26.7	85.0	2.4	186
5.....	1	7	94.77	111.2	83.4	28.5	85.6	2.2	201
	2	6	88.53	103.9	81.9	28.6	86.0	2.5	196
	3	7	72.81	85.4	69.6	31.5	84.8	2.2	201
6.....	1	5	57.12	109.8	84.4	26.1	84.9	2.2	210
	2	4	52.60	101.1	82.3	28.5	84.1	2.5	210
	3	5	46.47	89.3	81.5	27.9	84.3	2.4	249
7.....	1	8	71.45	110.2	88.5	24.0	86.1	2.0	215
	2	8	64.45	99.4	87.7	22.8	85.5	2.0	237
	3	8	58.61	90.4	85.6	24.5	85.4	2.0	232
8.....	1	13	91.40	108.6	88.1	22.9	85.2	1.9	179
	2	12	84.76	100.7	83.0	23.4	84.9	2.0	190
	3	13	76.41	90.8	80.7	25.4	84.5	2.0	188
9.....	1	8	107.38	107.8	84.0	26.1	86.0	2.6	164
	2	9	99.35	99.7	83.7	26.8	84.6	2.6	166
	3	8	92.14	92.5	80.8	29.1	84.9	2.6	157
10.....	1	5	86.18	105.7	86.1	21.2	86.7	2.8	186
	2	5	82.49	101.2	84.4	24.1	86.2	2.7	192
	3	5	75.88	93.1	83.2	24.9	86.4	2.6	193
11.....	1	6	83.03	108.1	84.7	25.5	87.0	2.1	175
	2	6	78.19	101.8	81.7	26.5	86.4	2.1	178
	3	6	69.18	90.1	81.1	27.2	86.1	2.2	178
12.....	1	6	72.89	106.6	71.7	24.9	86.7	2.0	175
	2	5	68.62	100.3	71.0	24.5	86.5	2.0	192
	3	6	63.75	93.2	65.4	27.9	86.1	2.1	185

The percentage of moisture in the corn at the time of harvest was taken as a fair measure of the degree of maturity. The higher yielding groups generally tend to include more of the earlier strains. The moisture content of the highest yielding third is lowest in 15 of the 24 comparisons. The middle yielding third was drier at harvest than that of the lowest yielding third in 17 of the 24 comparisons. These data correspond with those of previous years.

The differences in shelling percentages between the thirds were not large. The trend, however, would seem to indicate a relation between shelling percentage and yield. The highest yielding third of the open-pollinated class had the highest shelling percentage in eight of the 12 fields. The middle third had the highest in two fields as was also true with the lowest yielding third in Districts 7 and 11. The highest yielding third in the hybrid class

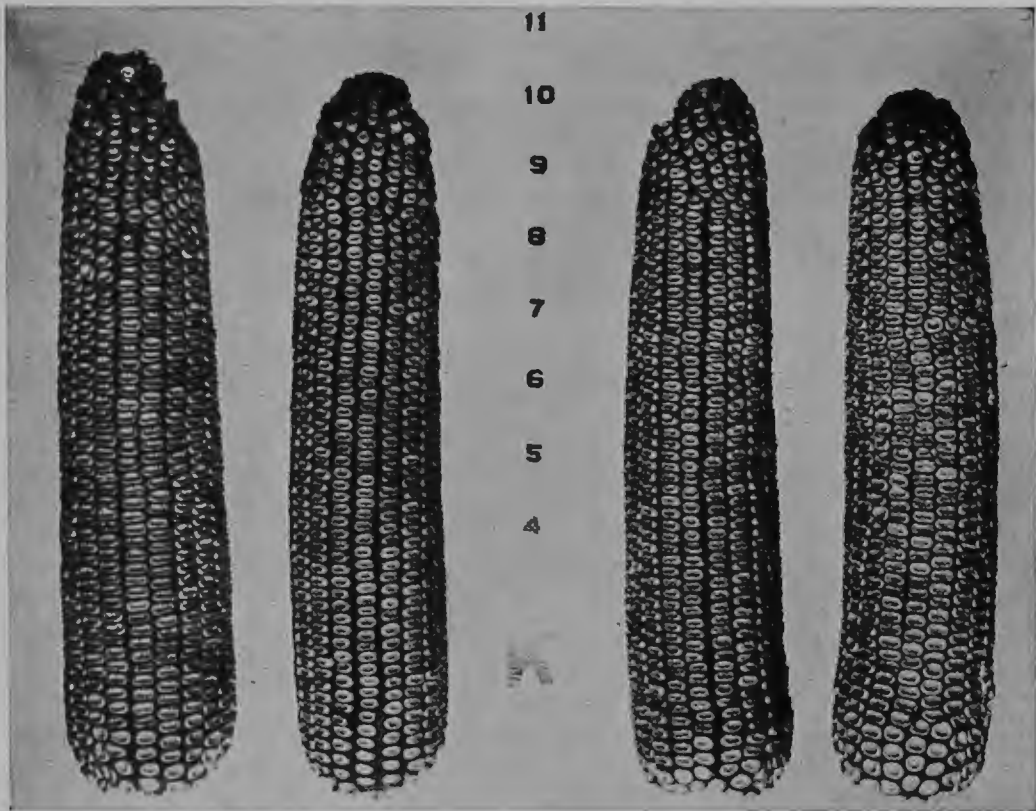


Fig. 8. McCulloch Yellow Dent. Developed by Fred McCulloch of Iowa County. This corn is of average maturity and is apparently well suited to planting in the southern half of the state where it has given yields above the average in each of the six districts.

had the highest shelling percentage in ten of the fields and the middle third in the other two.

Resistance to lodging is becoming more important in passing judgment on the desirability of a strain of corn. This quality is receiving more attention in the yield test. Observations were made at the time of harvesting in 1929. An estimate of the amount of lodging on each plat was recorded in the form of a grade. These grades, ranging from 1 to 5, may be described as follows:

- Grade 1. Stalks standing practically perfectly.
- Grade 2. Most of the stalks standing upright with very few leaning badly or broken.
- Grade 3. Average—neither good nor bad.
- Grade 4. Rather badly leaning or down.
- Grade 5. Practically all down.

These grades may be described best by quoting from the observer as he looks over the plats as follows:

- Grade 1. "Wow! there's a good one—couldn't be better."
- Grade 2. "Say, there's a good one, too. But not as good as the first. There's a couple of stalks leaning pretty badly and another broken."
- Grade 3. "Just another plat."
- Grade 4. "Gee, I'd hate to husk that stuff. Makes my back ache to think of it."
- Grade 5. "What? Has that been husked? Looks as if someone had driven over it with a team and wagon."

The grades shown in the tables represent the average of such estimates on ten plats.

The tendency to lodge apparently has no relation to yield. The value of these observations lies in connection with a study of the desirability of the individual entry.

The data indicate little relation between weight of ear and yield. Some strains may have rather small ears but many plants produce more than one ear resulting in a high yield.

PLAN FOR 1930

(1) The map indicates the boundaries of the four sections and the twelve districts into which the state has been divided for the Iowa Corn Yield Test. Entries may be made in one or more of the 12 districts.

(2) A class is provided for hybrids involving one or more inbred strains. Hybrids of varieties and strains involving no inbreeding will be included in the open-pollinated class. The two classes will not compete with each other for any premiums except the Banner Trophy.

(3) All entries in any one district will be grown side by side a sufficient number of times to insure a fair comparison.

(4) Each entry will be given a number at the time the seed is prepared for planting. The name of the competitor will not be known until the final yields have been computed.

(5) All yields will be of sound, shelled corn with a uniform moisture content.

(6) The Association is requiring that all samples be received untreated.

HOW TO MAKE ENTRY

(1) A fee of \$3.00 for each district entry will be charged for corn grown in Iowa. A charge of \$10.00 for each district entry will be made for corn from outside the state. The entry fee must accompany the entry.

(2) Applications for entry together with entry fee should be mailed immediately to the Iowa Corn and Small Grain Growers' Association at Ames, Iowa.

(3) A competitor may make as many entries in any one district as he desires, providing real differences exist between the entries.

(4) For each district entry the competitor must supply, free of charge, four pounds of **high germinating untreated** shelled corn ready to plant. This seed becomes the property of the Iowa Corn and Small Grain Growers' Association.

(5) Each sample must be labeled distinctly and entered under the name and address of the grower. The variety name of the corn if known and the district of the state in which it is to compete must be given.

(6) Corn should be shipped in heavy bags or strong containers to insure its reaching the Association in good condition.

(7) Entries close May 1, 1930. The entry blank, entry fee and four pounds of seed corn must be in the hands of the association by that time.

PREMIUMS FOR 1930 TEST

(1) The Banner Trophy is awarded annually by Raymond A. Pearson, ex-president of Iowa State College, to the Iowa grower whose entry produces the highest percentage above the average yield of all entries in its class in the three districts of any section. Thus the highest yielding section entries of the two classes compete for the banner trophy. Only section entries are eligible.

(2) A gold medal will be awarded to the entrant in each class in each section whose corn gives the highest percentage yield above the average of all samples of that class included in the district in which the entry was made. All entries included in a section are eligible to compete for the gold medal whether included in one, two, or three districts. The yield made in a single district in comparison with the average yield of the class will be the basis of award.

(3) In each district the Association will award a bronze medal for the highest yielding corn in each class entered by a grower residing in that district where the test is made.

(4) The highest yielding third of both classes in each district will receive suitable ribbons from the Association.

(5) Geo. M. Allee, of Newell, Iowa, past president of the Association, is offering the following cash premiums for entries made by residents of the district in which the entry is made.

- A. \$3.00 for second highest yielding entry.
- B. \$2.00 for third highest yielding entry.
- C. \$2.00 for fourth highest yielding entry.
- D. \$1.00 for fifth highest yielding entry.

Entries in the hybrid class, and entries made by the United States Department of Agriculture, the Iowa State College, and Mr. Allee are not eligible for the above cash premiums.

TYPE-PRODUCTION CLASS

This ten-ear class will be continued in the 1931 Iowa Corn and Small Grain Show to which only Iowa strains entered in the 1930 yield test are eligible. These ten ears will be submitted by the grower, from his 1930 crop grown from the same seed stock as that entered in the yield test.

The appearance of the ten ears will count one-third and the yield made by the strain in the 1930 test will count two-thirds.

No entry fee in the show will be required.

Entry may be made in any section where a district entry is made in the Iowa Corn Yield Test. Where a strain is entered in more than one district of a section the one in which the yield is the highest percentage above the mean of those with which it is compared shall be the one used in computing the yield score. When entries are made in more than one section separate samples for each entry must be provided.

The prizes indicated below are offered in this class:

Lot I—Northern section

- | | |
|-----------|-----------|
| 1. \$6.00 | 4. \$3.00 |
| 2. 5.00 | 5. 2.00 |
| 3. 4.00 | 6. 1.00 |

Lot II—North Central section

Lot III—South Central section

Lot IV—Southern section

Premiums in Lots II, III and IV same as in Lot 1.

Please completely fill out the following form for each strain entered in the 1930 Iowa Corn Yield Test.

APPLICATION FOR ENTRY

I hereby make application for entry in the Yield Test of the Iowa Corn and Small Grain Growers' Association and agree to ship, prepaid, four pounds of **high germinating untreated** shelled seed corn to the Association before May 1, 1930. I am the grower of this seed, and agree to abide by the provisions of the contest. My entry fee is enclosed. (Entry fee, corn grown in Iowa \$3.00, corn from out of the state, \$10.00.)

District in which corn is to compete.....

Have you entered this corn before?..... What year?.....

In what year was this seed produced?.....

Variety or strain name

Is this a hybrid involving an inbred?.....

If so, indicate the parent strains.....

In what county and state was your entry grown?.....

From whom did you obtain your first seed?.....

How long have you produced this variety or strain?.....

Name

Post Office Rural Route.....

State

All applications should be mailed to the

SECRETARY, IOWA CORN AND SMALL GRAIN
GROWERS ASSOCIATION

Ames, Iowa